EXHIBIT A

BASE PROSPECTUS

TRAFIGURA FUNDING S.A.

(incorporated with limited liability in Luxembourg)

Guaranteed by

Trafigura Group Pte. Ltd.

(incorporated with limited liability in Singapore)

Trafigura Trading LLC

(incorporated with limited liability in Delaware)

and

Trafigura Pte Ltd

(incorporated with limited liability in Singapore)

EUR 3,000,000,000

Euro Medium Term Note Programme

This Base Prospectus has been approved by the Central Bank of Ireland (the "**Central Bank**"), as competent authority under Regulation (EU) 2017/1129 (as amended or superseded) (the "**Prospectus Regulation**"). The Central Bank only approves this Base Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation. Such approval should not be considered as an endorsement of the Issuer or the Guarantors or the quality of the securities that are subject to this Base Prospectus. Investors should make their own assessment as to the suitability of investment in the securities. Application has been made to the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") for notes (the "**Notes**") issued under this Euro Medium Term Note Programme (the "**Programme**") within 12 months of this Base Prospectus to be admitted to the Official List (the "**Official List**") and to trading on its regulated market. The regulated market of Euronext Dublin is a regulated market for the purposes of Directive 2014/65/EU (as amended, "**MiFID II**"). Such approval relates only to the Notes which are to be admitted to trading on the regulated market of the Euronext Dublin or other regulated markets for the purposes of MiFID II or which are to be offered to the public in any Member State of the European Economic Area (the "**EEA**").

The Programme also permits Notes to be issued on the basis that they will not be admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system or that they will be admitted to listing, trading and/or quotation by such other or further competent authorities, stock exchanges and/or quotation systems as may be agreed with the Issuer.

This Base Prospectus is valid for 12 months from its date in relation to Notes which are to be admitted to trading on a regulated market in the EEA. For these purposes, reference(s) to the EEA include(s) the United Kingdom. The obligation to supplement this Base Prospectus in the event of a significant new factor, material mistake or material inaccuracy does not apply when this Base Prospectus is no longer valid.

The Notes are issued by Trafigura Funding S.A. (the "**Issuer**") and are unconditionally and irrevocably guaranteed on a joint and several basis by each of Trafigura Group Pte. Ltd., Trafigura Trading LLC and Trafigura Pte Ltd (each, a "**Guarantor**" and together, the "**Guarantors**").

The Notes constitute direct, unconditional, unsubordinated and unsecured obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* in right of payment with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such obligations as may be preferred by mandatory provisions of law. The Notes are unconditionally and irrevocably guaranteed, jointly and severally, on a senior unsecured basis by each of the Guarantors. The guarantee of the Notes (the "**Guarantee**") will rank at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantors, save for such obligations as may be preferred by mandatory provisions of law.

Investing in Notes issued under the Programme involves certain risks. The principal risk factors that may affect the abilities of the Issuer and the Guarantors to fulfil their respective obligations under the Notes and the Guarantee are discussed under "Risk Factors" below.

Arranger

ING

Dealers

Citigroup	**Credit Suisse**	**Deutsche Bank**
ING	**Société Générale Corporate & Investment Banking**	

11 September 2020

IMPORTANT NOTICES

Responsibility for this Base Prospectus

The Issuer and each Guarantor accepts responsibility for the information contained in this Base Prospectus and any Final Terms and declares that the information contained in this Base Prospectus is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

Final Terms/Drawdown Prospectus

Each Tranche (as defined herein) of Notes will be issued on the terms and subject to the conditions set out herein under "*Terms and Conditions of the Notes*" (the "**Conditions**") as completed by a document specific to such Tranche called final terms (the "**Final Terms**") or in a separate prospectus specific to such Tranche (the "**Drawdown Prospectus**") as described under "*Final Terms and Drawdown Prospectuses*" below.

Other relevant information

This Base Prospectus must be read and construed together with any supplements hereto and with any information incorporated by reference herein and, in relation to any Tranche of Notes which is the subject of Final Terms, must be read and construed together with the relevant Final Terms. In the case of a Tranche of Notes which is the subject of a Drawdown Prospectus, each reference in this Base Prospectus to information being specified or identified in the relevant Final Terms shall be read and construed as a reference to such information being specified or identified in the relevant Drawdown Prospectus unless the context requires otherwise.

The Issuer and the Guarantors have confirmed to the Dealers named under "*Subscription and Sale*" below that this Base Prospectus contains all information which is (in the context of the Programme, the issue, offering and sale of the Notes and the Guarantee of the Notes) material; that such information is true and accurate in all material respects and is not misleading in any material respect; that any opinions, predictions or intentions expressed herein are honestly held or made and are not misleading in any material respect; that this Base Prospectus does not omit to state any material fact necessary to make such information, opinions, predictions or intentions (in the context of the Programme, the issue, offering and sale of the Notes and the Guarantee of the Notes) not misleading in any material respect; and that all proper enquiries have been made to verify the foregoing.

Market data and certain industry forecasts used throughout this Base Prospectus have been obtained from internal surveys, market research and publicly available information and industry publications. Industry publications generally state that the information that they contain has been obtained from sources believed to be reliable but that the accuracy and completeness of that information is not guaranteed. Similarly, internal surveys, industry forecasts and market research, while believed to be reliable, have not been independently verified, and none of the Issuer, the Guarantors or the Dealers make any representation as to the accuracy of that information.

Substantially all the information contained in this Base Prospectus concerning the position of the Group vis-à-vis its competitors is based on internal analysis derived from publicly available information. The Group believes that these sources and estimates are reliable, but the Group and the Dealers have not independently verified them. Any discussion of matters in this Base Prospectus relating to competitive position is, therefore, subject to uncertainty due to concerns about the completeness or reliability of available official and public information.

Unauthorised information

No person has been authorised to give any information or to make any representation not contained in or not consistent with this Base Prospectus or any other document entered into in relation to the Programme or any information supplied by the Issuer or the Guarantors or such other information as is in the public domain and, if given or made, such information or representation should not be relied upon as having been authorised by the Issuer, the Guarantors or any Dealer.

Neither the Dealers nor any of their respective affiliates have authorised the whole or any part of this Base Prospectus and none of them makes any representation or warranty or accepts any responsibility as to the accuracy or completeness of the information contained in this Base Prospectus or any responsibility

for any acts or omissions of the Issuer, the Guarantors or any other person (other than the relevant Dealer) in connection with the issue and offering of the Notes. Neither the delivery of this Base Prospectus or any Final Terms nor the offering, sale or delivery of any Note shall, in any circumstances, create any implication that the information contained in this Base Prospectus is true subsequent to the date hereof or the date upon which this Base Prospectus has been most recently amended or supplemented or that there has been no adverse change, or any event reasonably likely to involve any adverse change, in the prospects or financial or trading position of the Issuer or the Guarantors since the date thereof or, if later, the date upon which this Base Prospectus has been most recently amended or supplemented or that any other information supplied in connection with the Programme is correct at any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

Restrictions on distribution

The distribution of this Base Prospectus and any Final Terms and the offering, sale and delivery of the Notes in certain jurisdictions may be restricted by law. Persons into whose possession this Base Prospectus or any Final Terms comes are required by the Issuer, the Guarantors and the Dealers to inform themselves about and to observe any such restrictions. For a description of certain restrictions on offers, sales and deliveries of Notes and on the distribution of this Base Prospectus or any Final Terms and other offering material relating to the Notes, see "*Subscription and Sale*". In particular, Notes have not been and will not be registered under the United States Securities Act of 1933 (as amended) (the "**Securities Act**") and may not be offered or sold in the United States other than pursuant to an exemption from the registration requirements of the Securities Act. Securities may also be subject to U.S. tax law requirements.

Neither this Base Prospectus nor any Final Terms constitutes an offer or an invitation to subscribe for or purchase any Notes and should not be considered as a recommendation by the Issuer, the Guarantors, the Dealers or any of them that any recipient of this Base Prospectus or any Final Terms should subscribe for or purchase any Notes. Each recipient of this Base Prospectus or any Final Terms shall be taken to have made its own investigation and appraisal of the condition (financial or otherwise) of the Issuer and the Guarantors.

MiFID II product governance / target market – The Final Terms (or Drawdown Prospectus, as the case may be) in respect of any Notes may include a legend entitled "*MiFID II Product Governance*" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the "**MiFID Product Governance Rules**"), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID Product Governance Rules.

IMPORTANT – EEA AND UK RETAIL INVESTORS – If the Final Terms (or Drawdown Prospectus, as the case may be) in respect of any Notes includes a legend entitled "*Prohibition of Sales to EEA and UK Retail Investors*", the Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**") or the United Kingdom. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II, or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended or superseded), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA or in the United Kingdom has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA or in the United Kingdom may be unlawful under the PRIIPs Regulation.

Benchmark Regulation

Interest and/or other amounts payable under the Notes may be calculated by reference to certain reference rates. Any such reference rate may constitute a benchmark for the purposes of Regulation (EU) 2016/1011 (the "**Benchmark Regulation**"). If any such reference rate does constitute such a benchmark, the Final Terms will indicate whether or not the benchmark is provided by an administrator included in the register of administrators and benchmarks established and maintained by the European Securities and Markets Authority ("**ESMA**") pursuant to Article 36 (*Register of administrators and benchmarks*) of the Benchmark Regulation. Transitional provisions in the Benchmark Regulation may have the result that the administrator of a particular benchmark is not required to appear in the register of administrators and benchmarks at the date of the Final Terms. The registration status of any administrator under the Benchmark Regulation is a matter of public record and, save where required by applicable law, the Issuer does not intend to update the Final Terms to reflect any change in the registration status of the administrator.

Product Classification pursuant to Section 309B of the Securities and Futures Act (Chapter 289) of Singapore

The Final Terms in respect of any Notes may include a legend entitled "Notification under Section 309B(1)(c) of the Securities and Futures Act (Chapter 289) of Singapore (the "**SFA**"). The Issuer will make a determination in relation to each issue about the classification of the Notes being offered for purposes of section 309B(1)(a). Any such legend included on the relevant Final Terms will constitute notice to "relevant persons" for the purposes of section 309B(1)(c) of the SFA.

Unless otherwise stated in the Final Terms or the Drawdown Prospectus in respect of any Notes, all Notes issued or to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018).

Alternative Performance Measures

In addition to the financial performance measures established by IFRS, this Base Prospectus contains certain financial measures that are presented for the purpose of assisting securities analysts, investors and other interested parties in understanding the Group's financial performance. The relevant metrics are identified as Alternative Performance Measures ("**APMs**") for the purposes of the Guidelines on Alternative Performance Measures issued by the European Securities and Markets Authority and are accompanied by an explanation of each metric, see "*Key Performance Indicators*" on pages 217 to 220.

Such measures should not be considered as a substitute for those required by IFRS.

Notes may not be a suitable investment for all investors

Each of the risks highlighted in the section of this Base Prospectus headed "*Risk Factors*" could adversely affect the trading price of the Notes or the rights of investors under any Notes and, as a result, investors could lose some or all of their investment. Each potential investor in any Notes must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

- have sufficient knowledge and experience to make a meaningful evaluation of the Notes, the merits and risks of investing in the Notes and the information contained or incorporated by reference in this Base Prospectus or any applicable supplement;
- have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Notes and the impact such investment will have on its overall investment portfolio;
- have sufficient financial resources and liquidity to bear all of the risks of an investment in the Notes, including where the currency for principal or interest payments is different from the potential investor's currency;
- understand thoroughly the terms of the Notes and be familiar with the behaviour of any relevant indices and financial markets; and

- be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

Some Notes are complex financial instruments and such instruments may be purchased as a way to reduce risk or enhance yield with an understood, measured, appropriate addition of risk to their overall portfolios. A potential investor should not invest in the Notes, which are complex financial instruments, unless it has the expertise (either alone or with the help of a financial adviser) to evaluate how the Notes will perform under changing conditions, the resulting effects on the value of such Notes and the impact this investment will have on the potential investor's overall investment portfolio.

Programme limit

The maximum aggregate principal amount of Notes outstanding and guaranteed at any one time under the Programme will not exceed EUR 3,000,000,000 (and for this purpose, any Notes denominated in another currency shall be translated into euro at the date of the agreement to issue such Notes (calculated in accordance with the provisions of the Dealer Agreement as defined under "*Subscription and Sale*")). The maximum aggregate principal amount of Notes which may be outstanding and guaranteed at any one time under the Programme may be increased from time to time, subject to compliance with the relevant provisions of the Dealer Agreement.

Certain definitions

In this Base Prospectus, unless otherwise specified:

- references to a "**Member State**" are references to a Member State of the European Economic Area, references to "**EUR**" and "**euro**" are to the currency introduced at the start of the third stage of European economic and monetary union, and as defined in Article 2 of Council Regulation (EC) No 974/98 of 3 May 1998 on the introduction of the euro, as amended, references to "**U.S.$**", "**USD**", "**U.S. dollars**" and "**dollars**" are to United States dollars and references to "**sterling**", "**Pound Sterling**" and "**£**" are to the lawful currency of the United Kingdom;

- references herein to "**billions**" are to thousands of millions; and

- references herein to the "**Group**" or "**Trafigura**" are to Trafigura Group Pte. Ltd. and its consolidated subsidiaries.

Certain figures included in this Base Prospectus have been subject to rounding adjustments; accordingly, figures shown for the same category presented in different tables may vary slightly and figures shown as totals in certain tables may not be an arithmetic aggregation of the figures which precede them.

Stabilisation

In connection with the issue of any Tranche of Notes, the Dealer or Dealers (if any) named as the Stabilising Manager(s) (or persons acting on behalf of any Stabilising Manager(s)) in the applicable Final Terms may over allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However, stabilisation may not necessarily occur. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant Tranche of Notes is made and, if begun, may cease at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant Tranche of Notes and 60 days after the date of the allotment of the relevant Tranche of Notes. Any stabilisation action or over-allotment must be conducted by the relevant Stabilising Manager(s) (or person(s) acting on behalf of any Stabilising Manager(s)) in accordance with all applicable laws and rules.

CONTENTS

OVERVIEW OF THE PROGRAMME

The following overview is a general description of the Programme, must be read as an introduction to this Base Prospectus, and is qualified in its entirety by, the remainder of this Base Prospectus and in relation to the terms and conditions of any particular Tranche of Notes, the applicable Final Terms. Words and expressions defined elsewhere in this Base Prospectus shall have the same meaning in this overview unless otherwise defined herein.

Issuer:	Trafigura Funding S.A.
Guarantors:	Trafigura Group Pte. Ltd. ("**TGPL**" or the "**Company**"), Trafigura Trading LLC ("**TTL**") and Trafigura Pte Ltd ("**TPTE**").
Arranger:	ING Bank N.V.
Dealers:	Citigroup Global Markets Europe AG, Citigroup Global Markets Limited, Credit Suisse Securities (Europe) Limited, Deutsche Bank Aktiengesellschaft, ING Bank N.V., Société Générale and any other Dealer appointed from time to time by the Issuer and the Guarantors either generally in respect of the Programme or in relation to a particular Tranche of Notes.
Trustee:	Citicorp Trustee Company Limited, or any successor trustee appointed pursuant to the Trust Deed (as amended and/or supplemented and/or restated) from time to time.
Principal Paying Agent:	Citibank N.A., London Branch, or any successor principal paying agent appointed pursuant to the Paying Agency Agreement (as amended and/or supplemented and/or restated) from time to time.
Irish Listing Agent:	Walkers Listing Services Limited.
Final Terms or Drawdown Prospectus:	Notes issued under the Programme may be issued either (1) pursuant to this Base Prospectus and associated Final Terms or (2) pursuant to a Drawdown Prospectus. The terms and conditions applicable to any particular Tranche of Notes will be the Conditions as completed by the relevant Final Terms or, as the case may be, as supplemented, amended and/or replaced by the relevant Drawdown Prospectus.
Listing and Trading:	Application has been made for Notes to be admitted during the period of twelve months after the date hereof to listing on the Official List and to trading on the regulated market of Euronext Dublin. The Programme also permits Notes to be issued on the basis that they will not be admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system or to be admitted to listing, trading and/or quotation by such other or further competent authorities, stock exchanges and/or quotation systems as may be agreed with the Issuer.
Clearing Systems:	Euroclear Bank SA/NV ("**Euroclear**") and/or Clearstream Banking S.A. ("**Clearstream, Luxembourg**" and together with Euroclear, the "**ICSDs**") and/or, in relation to any Tranche of Notes, any other clearing system as may be specified in the relevant Final Terms.
Initial Programme Amount:	Up to EUR 3,000,000,000 (or its equivalent in other currencies) aggregate principal amount of Notes outstanding and guaranteed at any one time. The Issuer may increase the

amount of the Programme in accordance with the terms of the Dealer Agreement.

Issuance in Series:	Notes will be issued in Series. Each Series may comprise one or more Tranches issued on different issue dates. The Notes of each Series will all be subject to identical terms, except that the issue date and the amount of the first payment of interest may be different in respect of different Tranches. The Notes of each Tranche will all be subject to identical terms in all respects save that a Tranche may comprise Notes of different denominations.
Forms of Notes:	Notes may only be issued in bearer form. Each Tranche of Notes will initially be in the form of either a Temporary Global Note or a Permanent Global Note, in each case as specified in the relevant Final Terms. Each Global Note will be deposited on or around the relevant issue date with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system. Each Temporary Global Note will be exchangeable for a Permanent Global Note or, if so specified in the relevant Final Terms, for Definitive Notes. If the TEFRA D Rules are specified in the relevant Final Terms as applicable, certification as to non-U.S. beneficial ownership will be a condition precedent to any exchange of an interest in a Temporary Global Note or receipt of any payment of interest in respect of a Temporary Global Note. Each Permanent Global Note will be exchangeable for Definitive Notes in accordance with its terms. Definitive Notes will, if interest-bearing, have Coupons attached and, if appropriate, a Talon for further Coupons.
Currencies:	Notes may be denominated in euro, U.S. dollars or in any other currency or currencies, subject to compliance with all applicable legal and/or regulatory and/or central bank requirements.
Status of the Notes:	Notes will be issued on an unsubordinated basis.
Status of the Guarantee:	Notes will be unconditionally and irrevocably guaranteed by each Guarantor, on an unsubordinated and joint and several basis.
Issue Price:	Notes may be issued at any price. The price and amount of Notes to be issued under the Programme will be determined by the Issuer, the Guarantors and the relevant Dealer(s) at the time of issue in accordance with prevailing market conditions.
Maturities:	Any maturity, subject, in relation to specific currencies, to compliance with all applicable legal and/or regulatory and/or central bank requirements. Where Notes have a maturity of less than one year and either (a) the issue proceeds are received by the Issuer in the United Kingdom or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, such Notes must: (i) have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued only to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of

investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses; or (ii) be issued in other circumstances which do not constitute a contravention of section 19 of the Financial Services and Markets Act (the "**FSMA**") by the Issuer.

Redemption: Notes will be redeemable at par.

Optional Redemption: Notes may be redeemed before their stated maturity at the option of the Issuer (either in whole or in part) and/or the Noteholders to the extent (if at all) specified in the relevant Final Terms.

Early Redemption: Except as described in "*Optional Redemption*" above, early redemption will only be permitted for tax reasons, as described in Condition 9(b) (*Redemption and Purchase - Redemption for tax reasons)*, or if the aggregate principal amount of outstanding Notes of the relevant Series is less than 10 per cent. of the aggregate principal amount of such Series, as described in Condition 9(f) (*Redemption and Purchase – Redemption in the case of Minimal Outstanding Amount*).

Interest: Notes may be interest-bearing or non-interest bearing. Interest (if any) may accrue at a fixed rate or a floating rate and the method of calculating interest may vary between the issue date and the maturity date of the relevant Series.

Denominations: Notes issued under the Programme which are to be admitted to trading on the regulated market of Euronext Dublin and/or admitted to listing, trading and/or quotation by any other listing authority, stock exchange and/or quotation system which is a regulated market situated or operating in a Member State and/or offered to the public in any Member State, in each case in circumstances which require the publication of a prospectus under the Prospectus Regulation, may not have a minimum denomination of less than EUR 100,000 (or its equivalent in any other currency). Subject thereto, Notes will be issued in such denominations as may be specified in the relevant Final Terms, subject to compliance with all applicable legal and/or regulatory and/or central bank requirements.

Negative Pledge: The Notes will have the benefit of a negative pledge as described in Condition 5 (*Negative Pledge)*.

Cross-Default: The Notes will have the benefit of a cross-default as described in Condition 12 (*Events of Default)*.

Taxation: All payments of principal and interest in respect of Notes by or on behalf of the Issuer or the Guarantors will be made free and clear of withholding taxes of Luxembourg and Singapore, as the case may be, unless the withholding is required by law. In that event, the Issuer or (as the case may be) the relevant Guarantor will (subject as provided in Condition 10 (*Payments*) and Condition 11 (*Taxation*)) pay such additional amounts as will result in the Noteholders receiving such amounts as they would have received in

respect of such Notes had no such withholding been required.

Substitution: The Trustee shall, in certain circumstances without the consent of the Noteholders, agree to the substitution of the Issuer or any Guarantor as described in Condition 16(c) (*Substitution*).

Governing Law: English law.

Selling Restrictions: For a description of certain restrictions on offers, sales and deliveries of Notes and on the distribution of offering material in the European Economic Area, the United Kingdom, Australia, Belgium, Denmark, France, Germany, Hong Kong, the Republic of Italy, Japan, Jersey, Korea, the Grand Duchy of Luxembourg, The Netherlands, Norway, the People's Republic of China, the Republic of China (Taiwan), Singapore, Spain, Switzerland, the United Arab Emirates (excluding the Dubai International Financial Centre) and Dubai International Financial Centre, see "*Subscription and Sale*".

RISK FACTORS

Any investment in the Notes is subject to a number of risks. Prior to investing in the Notes, prospective investors should carefully consider risk factors associated with any investment in the Notes, the business of the Issuer and the Guarantors and the industry or industries in which each of them operates together with all other information contained in this Base Prospectus, including, in particular the risk factors described below. Words and expressions defined in the "Terms and Conditions of the Notes" below or elsewhere in this Base Prospectus have the same meanings in this section.

The following is not an exhaustive list or explanation of all risks which investors may face when making an investment in the Notes and should be used as guidance only. Additional risks and uncertainties relating to the Issuer and the Guarantors that are not currently known to the Issuer or the Guarantors, or that any of them currently deem immaterial, may individually or cumulatively also have a material adverse effect on the business, prospects, results of operations and/or financial position of the Issuer and/or the Guarantors and, if any such risk should occur, the price of the Notes may decline and investors could lose all or part of their investment. Investors should consider carefully whether an investment in the Notes is suitable for them in light of the information in this Base Prospectus and their personal circumstances.

The risk classifications below are for ease of reference only. Some risks (although listed under the heading of a certain risk classification) may in fact involve different categories. Investors should not rely on the headings to classify the relevant risks and should read each risk factor carefully.

CONTENTS OF THE RISK FACTORS

1. Financial Market and Economic Risks

Trafigura is exposed to declines in the current and expected volumes of supply or demand for commodities, to commodity prices and to deterioration in economic and financial conditions.

The current and expected volumes of supply and demand for the commodities in which Trafigura is active vary over time based on changes in resource availability, government policies and regulation, costs of production, global, regional and national economic conditions, demand in end markets for products in which the commodities are used, technological developments, including commodity substitutions, fluctuations in global production capacity, global and regional weather conditions and natural disasters including, earthquake, tsunami, hurricanes, wildfire, drought, and flooding, all of which impact global markets and demand for commodities. Furthermore, changes in current and expected supply and demand conditions impact the current and expected future prices (and thus the price curve) of each commodity.

Declines in the volume of each commodity produced or traded by Trafigura, as well as declines in the price of commodities, could materially adversely impact Trafigura's business, results of operations and earnings. These declines could result in a reduction in the average trading unit margin achieved in respect of the volumes handled by Trafigura's trading activities, or a reduction in the volume and/or margin in respect of commodities produced by Trafigura's industrial assets.

Sustained increases in the price of commodities may require higher levels of working capital to be put in place in order to finance Trafigura's trading activities. Although Trafigura expects the continued support of financial institutions, there can be no assurance that additional credit or funding will be made available to Trafigura in the abovementioned circumstances or that the cost of such funding will not have a negative impact on the profitability of its trading activities. See "*Liquidity risk and a failure to obtain funds could limit Trafigura's ability to engage in desired activities and grow its business*."

In addition, a decline in economic and financial conditions globally or in a specific country, region or sector may have a material adverse effect on Trafigura's business, results of operations or earnings. For example, although most commodities' fixed pricing periods are relatively short, a significant rapid reduction or increase in commodity prices could result in customers or suppliers, as the case may be, being unwilling or unable to honour their contractual commitments to purchase or sell commodities on pre-agreed pricing terms. In addition, a tightening of available credit may make it more difficult for Trafigura to obtain, or may increase the cost of obtaining, financing for its trading activities and capital expenditures at its industrial assets.

Liquidity risk and a failure to obtain funds could limit Trafigura's ability to engage in desired activities and grow its business.

Liquidity, or ready access to funds, is essential to Trafigura's business. Liquidity risk is the risk that Trafigura is unable to meet its payment obligations when due, or that it is unable, on an ongoing basis, to borrow funds in the market on an unsecured or secured basis at an acceptable price to fund actual or proposed commitments. A lack of liquidity may mean that Trafigura will not have funds available to maintain or increase its trading activities, meet margin requirements, grow its industrial activities as planned or take advantage of other opportunities that may arise in its trading or industrial activities.

Trafigura's trading activities employ significant amounts of working capital to fund purchases of commodities for future delivery to Trafigura's end customers, to meet margin requirements under derivative contracts and to fund the acquisition and maintenance of certain transport and storage assets which complement its trading activities. Continued funding of and access to working capital is critical for Trafigura to maintain its historic levels of trading activity and increase such levels in the future. Trafigura's industrial activities are also capital intensive and the continued funding of such activities is critical for Trafigura to maintain its ownership interests in its industrial assets, to maintain production levels in periods when net operating cash flow is negative or insufficient to cover capital expenditures, to develop its activities or increase production levels in the future in accordance with its business plan and to grow its industrial activities through the acquisition of new assets. Prudent liquidity risk management requires Trafigura to maintain sufficient cash and cash equivalents through the accumulation of retained earnings and to have ready sources of committed funding available to meet anticipated and unanticipated funding needs. While Trafigura adjusts its minimum internal liquidity targets in response to changes in market conditions, its liquidity may be impaired due to circumstances it is unable to control, such as general market disruptions, increases in the prices of commodities or an operational problem that affects its suppliers or customers or Trafigura itself.

In addition to maintaining a cash position, Trafigura relies on two other principal sources of liquidity: (i) borrowings under various short-term and long-term bank and asset-backed facilities and (ii) issuance of notes in the debt capital markets. An inability to raise money in the long-term and short-term debt markets could have a material adverse effect on Trafigura's liquidity. Trafigura's access to debt in amounts adequate to finance its activities could be impaired by factors that affect Trafigura in particular or the industries or geographies in which it operates. For example, lenders could develop a negative perception of Trafigura's short-term or long-term financial prospects if Trafigura incurred large losses, if the level of its trading activities were to materially decrease due to a market downturn in the demand for commodities, or if its business was otherwise materially adversely affected. Lenders could also develop a negative perception of the commodities trading industry if, for example, a competitor suffers from financial difficulties. Although Trafigura expects the continued support of financial institutions, there can be no assurance that additional credit or funding will be made available in the future.

Future debt financing, if accessible, may result in increased borrowing costs, increased financial leverage, decreased income available to fund further acquisitions and expansions and the imposition of restrictive covenants on Trafigura's businesses and operations. In addition, future debt financing may limit Trafigura's ability to withstand competitive pressures and render its businesses more vulnerable to economic downturns by exposing it to volatile interest rates, tighter credit markets and potentially reduced access to funding that may be needed to take advantage of future business opportunities.

Trafigura is exposed to geopolitical risk.

Trafigura operates and owns assets in a large number of geographic regions and countries and, as a result, is exposed to a wide range of political, regulatory and tax environments. These environments are subject to change in a manner that may be materially adverse for Trafigura, including changes to government policies and regulations governing industrial production, foreign investments, price controls, export controls, tariffs, income and other forms of taxation (including policies relating to the granting of advance rulings on taxation matters), nationalisation or expropriation of property, repatriation of income, royalties, the environment and health and safety.

Many of the commodities that Trafigura sources and markets are considered strategic resources for particular countries. Governments in these countries may decide not to recognise previous arrangements if they regard them as no longer being in the national interest. Governments may also implement export controls on commodities regarded by them as strategic (such as oil) or place restrictions on foreign

ownership of industrial assets or other assets considered strategic resources. Renegotiation or nullification of existing agreements, leases, permits or tax rulings, changes in fiscal policies (including new or increased taxes or royalty rates or the implementation of a windfall tax) and currency restrictions imposed by the governments of countries in which Trafigura operates could have a material adverse effect on Trafigura.

Trafigura's operations may also be affected by political and economic instability in some of the countries in which it operates. Such instability could be caused by, among other things, terrorism, civil war, guerrilla activities, military repression, civil disorder, crime, workforce instability, change in government policy or the ruling party, economic or other sanctions imposed by other countries, extreme fluctuations in currency exchange rates or high inflation.

International trade disputes could result in tariffs and other protectionist measures that could adversely affect Trafigura's business. Tariffs could increase the cost of the commodities that Trafigura trades. Tariffs could also make commodities more expensive for customers, which could reduce demand from customers and consumers. In the United States, the current administration has publicly supported, and in some instances has already proposed or taken action with respect to, significant changes to certain trade policies, including import tariffs and quotas, modifications to international trade policy, the withdrawal from or renegotiation of certain trade agreements and other changes that may affect international trade relations, any of which may require Trafigura to significantly modify Trafigura's current business practices or may otherwise materially and adversely affect Trafigura's business. Such changes could also result in retaliatory actions by United States' trade partners. For example, in 2018, the United States imposed tariffs and proposed quotas on aluminium imports to the United States. These actions and the possibility of trade conflicts stemming from these actions could negatively impact global trade and economic conditions in many of the regions where Trafigura does business. Countries may also adopt other protectionist measures that could limit Trafigura's ability to trade or reduce the viability of Trafigura's mining operations, which could have a material adverse effect on Trafigura's business.

The geopolitical risks associated with operating in a large number of regions and countries, if realised, could affect Trafigura's ability to manage or retain interests in its industrial activities and could have a material adverse effect on the profitability, ability to finance or, in extreme cases, viability of one or more of its industrial assets.

Trafigura has significant outstanding indebtedness.

Trafigura has a significant amount of indebtedness, which could potentially impair its operating and financial flexibility and could adversely affect its business and financial position. A high level of indebtedness could potentially require Trafigura to use a substantial portion of cash flow from operations to service its debt, which could reduce the funds available for capital expenditure, acquisitions and other general corporate purposes. This could also potentially limit Trafigura's ability to borrow additional funds and increase its vulnerability to adverse economic conditions.

Trafigura's financial performance is exposed to the level of treatment charges.

Due to the acquisition of Nyrstar and the subsequent integration of Nyrstar into the Group, Trafigura is exposed to additional risks related to commodity prices. Nyrstar's profitability, and consequently Trafigura’s profitability, is highly sensitive to the market price of zinc and lead (which determines the amount of value available to be shared between the miner and the smelter) and treatment charges ("**TCs**") (which determine how that value is shared between the miner and the smelter). The market price of zinc and lead impacts both (i) the TC contribution and (ii) the contribution of refined metals produced and sold over and above the metal content paid for in concentrates purchased from the miner ("**free metal**"), in each case, impacting Nyrstar's revenues. TC levels and the amount of free metal available each has a significant impact on Nyrstar's financial performance given that Nyrstar's revenues are mainly generated from smelting activities. In addition, Nyrstar's results are impacted by the prices of copper, silver, gold and other metals.

The prices of zinc, lead, copper, silver, gold and other metals have historically been subject to fluctuations in response to market forces. Factors largely beyond Nyrstar's control, such as the cyclicality of consumption, actual or perceived changes in levels of supply and demand, the availability and cost of substitute materials, inventory levels maintained by producers, trading on the metals market and exchange rates, all influence metal prices. In addition, Nyrstar's results remain closely linked to the levels of TCs

that it charges zinc miners to refine their zinc concentrates and lead miners to refine their lead concentrates. TCs are, in effect, paid by the miner to the smelter in the form of a concession (or deduction) on the price of the zinc or lead concentrates that the miner sells to the smelter. A decrease in TCs can be expected to have a material adverse effect on Nyrstar's business, results of operations and financial condition.

TCs are subject to fluctuations based on the supply and demand dynamics of the global zinc, lead or copper concentrate market. TCs are typically negotiated annually between individual miners and smelters in view of the anticipated supply and demand of concentrates and the likely metal price; a "benchmark" level of TCs is typically set in the first or the second quarter of each year. When supplies of concentrates (i.e., the mines' output) exceed available smelting capacity utilisation, there typically is a positive impact on the TCs realised by the smelters, and the smelters are able to obtain a larger portion of the value of the contained metal. Conversely, when supplies of concentrates are less than available smelting capacity utilisation, there usually is a negative impact on the TCs for smelters, and a greater share of the metal value is retained by miners. Depending on timing and overall circumstances, an increase in smelting capacity utilisation, particularly in regions like China where production costs are lower compared to operations in more mature regions, could therefore significantly and adversely affect TCs. The impact of TC levels on Nyrstar's revenues is expected to further decrease in the future in line with the completion of the Port Pirie Redevelopment.

Trafigura is exposed to fluctuations in currency exchange and interest rates.

The significant majority of transactions undertaken by both Trafigura's trading and industrial activities are denominated in U.S. dollars. However, Trafigura is exposed to fluctuations in currency exchange rates:

- through its industrial activities, because a large proportion of the operating costs of these assets are denominated in the currency of the country in which each asset is located;
- through the costs of Trafigura's global office network, which are denominated largely in the currency of the country in which each office is located, the largest of such currency exposures being to the Swiss Franc, the Pound Sterling, the Singapore Dollar and the Euro; and
- through its trading activities, although only a small minority of purchase or sale transactions are denominated in currencies other than U.S. dollars.

The reporting currency and the functional currency of the majority of Trafigura's operations is the U.S. dollar, as this is assessed to be the principal currency of the economic environment in which Trafigura operates. The exchange rates between relevant local currencies and the U.S. dollar have historically fluctuated, and the translation effect of such fluctuations may have a material adverse effect on Trafigura's consolidated results of operations or financial condition.

Trafigura's exposure to changes in interest rates results from investing and borrowing activities undertaken to manage its liquidity and capital requirements. Substantially all of Trafigura's borrowings, other than its fixed-rate bonds, bear interest at floating rates. An increase in interest rates would therefore result in a relatively immediate increase in the cost of servicing Trafigura's indebtedness and could adversely affect Trafigura's financial results. Although borrowing costs are taken into account when setting transaction terms, there is no assurance that increased financing costs can be passed on to customers and/or suppliers. Trafigura may elect in the future to enter into interest rate swaps to convert some or all of its floating-rate debt to fixed-rate debt or enter into fixed-rate to floating-rate swaps. There can be no assurance that Trafigura will not be materially adversely affected by interest rate changes in the future.

COVID-19 Pandemic and Possible Similar Future Outbreaks

Different regions in the world have from time to time experienced outbreaks of various viruses and other transmissible diseases. As of the date of this Base Prospectus, a wide-spread global pandemic of severe acute respiratory syndrome coronavirus 2 (commonly known as SARS-CoV-2) and the infectious disease COVID-19, caused by the virus, is taking place. As the virus and diseases it causes are relatively new, effective cure and vaccines are yet to be developed. There have been rapid developments in the spread of COVID-19, which the World Health Organisation declared a pandemic on 11 March 2020. Since then,

the pandemic has caused various emergency measures being applied by various countries around the world and brought along substantial volatility in financial markets globally.

While COVID-19 is still spreading and the final implications of the pandemic are difficult to estimate at this stage, it is clear that it will affect the lives of a large portion of the global population and cause significant disruption. At this time, the pandemic has caused state of emergencies being declared in various countries, travel restrictions being imposed, quarantines been established and various institutions and companies being closed.

The ongoing COVID-19 pandemic and any possible future outbreaks of viruses may have a significant adverse effect on the Group. Firstly, a spread of such diseases amongst the employees of the Group, as well any quarantines affecting the employees of the Group or the Group's facilities, may reduce the possibility of the Group's personnel to carry out their work and thereby affect the Group's operations. Secondly, the current pandemic and any possible future outbreaks of viruses may have an adverse effect on the Group's suppliers or other counterparties, interfering with the ability of Trafigura's suppliers to manufacture the products it buys and the ability to transport commodities across borders. Thirdly, any quarantines or spread of viruses may affect the possibility of the customers of the Group to carry out their work, which may adversely affect the possibility to sell the Group's products to end-consumers. The Group is actively assessing and responding, where possible, to the effects of the COVID-19 pandemic on employees, customers, suppliers and service providers, and evaluating governmental actions being taken to curtail its spread.

The impact of COVID-19 in emerging market countries where Trafigura operates may also be greater due to generally less established healthcare systems. Further, public health crises caused by the COVID-19 outbreak may exacerbate other pre-existing political, social and economic risks in certain countries or globally.

Further to the above, the Group may be adversely affected by the wider macroeconomic effect of the ongoing COVID-19 pandemic and any possible future outbreaks. While the final effects of the COVID-19 pandemic are at this stage difficult to assess, it is likely that it will have substantial negative effect on the economies where the Group operates in. Any negative effect on the economy may decrease incomes of the end-customers of the Group and the demand for the Group's products. Such effects may also result in the insolvency of the Group's business partners, which could affect the operations of the Group, as well as its financial standing. Depending on the duration and severity of the current COVID-19 pandemic, it may also have the effect of heightening many of the other risks described in this document, such as risks relating to the successful completion of expansion projects, the Group's ability to maintain adequate internal controls in the event that employees are restricted from accessing offices for a significant period of time; restricted access to capital and increased borrowing costs; and complying with the covenants contained in the agreements that govern our existing indebtedness. For an update on how the Group is dealing with the COVID-19 outbreak, see "*Industry Overview – Recent Update*".

Even after the COVID-19 outbreak has subsided, the Group may continue to experience material adverse impact to our businesses as a result of its global economic impact, including any related recession, as well as lingering effects on demand for or oversupply of its products, suppliers, third-party service providers and/or customers. Further, the market disruption and volatility caused by the COVID-19 pandemic has increased the complexity of determining the value of the Group's assets. The adverse impact caused by plant closures, supply chain disruptions, travel and import/export restrictions, could potentially lead to significant impairments of the Group's assets. Lastly, the price of the Group's securities and the possibility of the Group to acquire further financing may be adversely affected. Any of the factors above could have an adverse effect on the Group's profits and financial position, and thereby affect the Group's ability to make the payments under the Notes.

2. Industry and Business Risks

The success of Trafigura's trading activities depends in part on its ability to identify and take advantage of arbitrage opportunities.

Many of the commodity markets in which Trafigura operates are fragmented and periodically volatile. As a result, discrepancies generally arise in respect of the prices at which the commodities can be bought or sold in different forms, geographic locations or time periods, taking into account the numerous relevant pricing factors, including freight and product quality. These pricing discrepancies can present Trafigura

with arbitrage opportunities whereby Trafigura is able to generate profit by sourcing, transporting, blending, storing or processing the relevant commodities.

Trafigura's profitability is, in large part, dependent on its ability to identify and exploit such arbitrage opportunities. A lack of such opportunities, for example due to a prolonged period of pricing stability in a particular market, or an inability to take advantage of such opportunities when they present themselves, because of, for example, a shortage of liquidity or an inability to access required logistics assets or other operational constraints, could adversely impact Trafigura's business, results of operations and financial condition.

The commodities industry is competitive and Trafigura may have difficulty effectively competing with other commodity trading and industrial companies.

Trafigura faces strong competition in each of its business segments. In addition, some of these competitors or existing producers may, in the future, use their resources to broaden into all of the markets in which Trafigura operates and therefore compete further against Trafigura. These competitors may also expand and diversify their commodity sourcing, processing or trading operations, or engage in pricing or other financial or operational practices that could increase competitive pressure on Trafigura across each of its business segments. Increased competition may result in losses of market share for Trafigura and could materially adversely affect Trafigura's business, results of operations and financial condition.

Trafigura is exposed to counterparty risk in its trading activities.

Trafigura's trading and industrial activities are subject to non-performance risk by its suppliers, customers and hedging counterparties. For example:

- a significant rapid increase in commodity prices could result in suppliers being unwilling to honour their contractual commitments to sell commodities to Trafigura at pre-agreed prices;

- a significant rapid reduction in commodity prices could result in customers being unwilling or unable to honour their contractual commitments to purchase commodities from Trafigura at pre-agreed prices;

- customers may take delivery of commodities from Trafigura and then find themselves unable to honour their payment obligations due to financial distress or any other reasons; and

- hedging counterparties may find themselves unable to honour their contractual commitment due to financial distress or other reason.

Trafigura seeks to reduce the risk of customer non-performance by requiring credit support from creditworthy financial institutions, where appropriate, and by imposing limits on open accounts extended. In addition, mark-to-market exposures in relation to hedging contracts are regularly and substantially collateralised (primarily with cash) pursuant to margining arrangements in place with such hedge counterparts. However, no assurance can be given that Trafigura's attempts to reduce the risk of customer non-performance will be successful in every instance or that its financial results will not be adversely affected by the failure of a counterparty or counterparties to fulfil their contractual obligations in the future. Such failure could have an adverse impact on Trafigura's business, results of operations and financial condition, including by creating an unintended, unmatched commodity price exposure.

Trafigura's risk management policies and procedures may not be fully effective.

Trafigura has devoted significant resources to developing and implementing policies and procedures to manage commodity price, foreign exchange, interest rate, counterparty (include credit), operational and regulatory risks, and expects to continue to do so in the future. Nonetheless, Trafigura's policies and procedures to identify, monitor and manage risks may not be fully effective.

Some of Trafigura's methods of monitoring and managing risk are based on historical market behaviour that may not be an accurate predictor of future market behaviour. Other risk management methods depend on evaluation of information relating to markets, suppliers, customers and other matters that are publicly available or otherwise accessible by Trafigura. This information may not in all cases be accurate, complete, up to date or properly evaluated. Management of operational, legal and regulatory risk requires, among other things, policies and procedures to properly record and verify a large number of transactions

and events, and these policies and procedures may not be fully effective in doing so. Trafigura uses, among other techniques, value-at-risk ("**VaR**") as a key risk measurement technique for its trading activities. VaR does not purport to represent actual gains or losses in fair value on earnings to be incurred by Trafigura, nor does Trafigura expect that VaR results are indicative of future market movements or representative of any actual impact on its future results. Failure to mitigate all risks associated with Trafigura's business could have a material adverse effect on Trafigura's business, results of operations and financial condition.

Trafigura's hedging strategy may not always be effective.

Trafigura's trading activities involve a significant number of purchase and sale transactions across multiple commodities. In order for Trafigura to mitigate the risks in its trading activities related to commodity price fluctuations and potential losses, Trafigura has a policy, at any given time, of hedging all index price exposure of its trading inventory not already contracted for sale at pre-determined prices through futures and swap commodity derivative contracts, either on commodities' exchanges or in the over the counter ("**OTC**") market. In the event of disruptions in the commodity exchanges or markets on which Trafigura engages in these hedging transactions, Trafigura's ability to manage commodity price risk may be adversely affected and this could in turn materially adversely affect its business, financial condition and results of operations.

In addition, Nyrstar continues to be exposed to the shape of the forward price curve for underlying metal prices. The volatility in the London Metal Exchange price creates differences between the average price Nyrstar pays for the contained metal and the price Nyrstar receives for it. Nyrstar engages in transactional hedging which means that it undertakes short-term hedging transactions to cover the timing risk between raw material purchases and sales of metal and to cover its exposure on fixed-price forward sales of metal to customers.

Trafigura's trading and industrial activities involve operating risks and hazards, many of which are outside Trafigura's control.

Trafigura's business is subject to numerous operating risks and hazards normally associated with the development and operation of natural resource or other industrial projects, many of which are beyond Trafigura's control. These operating risks and hazards include unanticipated variations in grade and other geological problems, seismic activity, climatic conditions such as flooding or drought, metallurgical and other processing problems, technical failures, unavailability of materials and equipment, industrial actions or disputes, industrial accidents, labour force disruptions, unanticipated transportation constraints, tribal action or political protests, environmental hazards, fire, explosions, vandalism and crime and other force majeure factors. These risks and hazards could result in damage to, or destruction of, properties, ships, storage facilities or production facilities, may cause production to be reduced or to cease at properties or production facilities, may result in personal injury or death, environmental damage, business interruption and legal liability, may result in actual production differing from estimates of production or may impede Trafigura's ability to deliver products on time to customers.

Smelters, an important part of Nyrstar's operations, are especially vulnerable to interruptions, particularly where events cause a stoppage which necessitates a shutdown in operations. Stoppages in smelting, even if lasting only a few hours, can cause the contents of furnaces to solidify, resulting in a plant closure for a significant period and necessitating expensive repairs, any of which could adversely affect Nyrstar's business, results of operations or financial condition.

The realisation of such operating risks and hazards and the costs associated with them could materially adversely affect Trafigura's business, results of operations and financial condition, including by requiring significant capital and operating expenditures to abate the risk or hazard, restore Trafigura or third party property, compensate third parties for any loss and/or pay fines or damages.

Risks relating to the integration of Nyrstar within Trafigura.

Following completion of the Nyrstar debt restructuring (the "**Nyrstar Debt Restructuring**") on 31 July 2019, the Group owns and controls substantially all of Nyrstar's operating business (the "**Nyrstar Operating Business**").

Following the Nyrstar Debt Restructuring, the Group's increased control of the Nyrstar Operating

Business involves risks that the acquired business will not operate in accordance with expectations and that business judgments concerning the value, strengths and weaknesses of the Nyrstar Operating Business acquired will prove to be incorrect. If the Group's increased interest in the Nyrstar Operating Business does not perform to expectations, the Group's results of operations and financial condition may be adversely affected. Furthermore, the Group may incur a number of significant unforeseen costs, including integration costs, in order to consolidate the Nyrstar Operating Business with its own business and operations. The successful integration of new businesses depends on the Group's ability to manage these new businesses, including cutting excess overheads and other costs. The successful integration of Nyrstar's operating business may also require substantial attention from the Group's senior management and the management of the Nyrstar Operating Business, which could disrupt the Group's operations by decreasing the time available that senior management dedicates to the management of the Group and on other acquisition opportunities.

There is no assurance that Trafigura will successfully or cost effectively integrate the Nyrstar Operating Business. If Trafigura is unable to successfully integrate the Nyrstar Operating Business or the acquisition otherwise does not perform to Trafigura's expectations, results of operations and financial condition may be adversely affected. It is also possible that the substantial management attention required by, and the indebtedness to be incurred in connection with, the Nyrstar Debt Restructuring could cause Trafigura to forgo other acquisition opportunities, particularly if the acquisition does not perform to Trafigura's expectations.

Trafigura has paid, and expects to continue to pay, significant costs in connection with the Nyrstar Debt Restructuring and other transactions related thereto. As a result of the Nyrstar Debt Restructuring, Trafigura may also incur costs associated with integrating the Nyrstar Operating Business, and these costs may be significant and may have an adverse effect on Trafigura's future operating results if the anticipated returns from the Nyrstar Operating Business are not achieved. Although Trafigura expects that the elimination of duplicative costs and the realisation of other efficiencies related to the integration of the Nyrstar Operating Business should allow Trafigura to offset these incremental expenses over time, the net benefit may not be achieved in the near term, or at all. Furthermore, Trafigura may also be liable for the past acts, omissions or liabilities (including environmental liabilities) of Nyrstar, which may be unforeseen or greater than anticipated at the time of the completion of the Nyrstar Debt Restructuring.

Accidents at Trafigura's trading and industrial activities, logistics and storage facilities could result in injuries and fatalities.

Any accidents or hazardous incidents causing personal injury, death or property or environmental damage at or to Trafigura's logistics and storage facilities, mines, concentrators, refineries or related facilities or surrounding areas may result in significant losses, interruptions in production, expensive litigation, imposition of penalties and sanctions or suspension or revocation of permits and licences. Risks associated with Trafigura's logistics and storage operations may include the risk of ruptures and spills from crude oil and other product carriers; spillage, leakage or seepage of solid materials or process water remaining after the extraction of metals and minerals from mined ore (tailings) or other hazardous substances found in storage or disposal facilities; and failure of tailings dams during the operating life of the mines or after closure.

Risks associated with Trafigura's mining operations include, but are not limited to, flooding, underground fires and explosions (including those caused by flammable gas), cave-ins or ground falls, discharges of gases or toxic chemicals, sinkhole formation and ground subsidence.

If accidents occur in the future, Trafigura's business and results of operations may be adversely impacted.

Trafigura's assets are subject to environmental hazards through their shipping, transportation and storage activities, and through their mining and smelting activities.

Where Trafigura holds or has interests in industrial activities, these assets are generally subject to environmental hazards as they involve the storage, disposal and transportation of hazardous materials. For example, Trafigura is the largest investor in Puma Energy Holdings Pte. Ltd. (together with its subsidiaries, the "**Puma Energy Group**", "**Puma**" and "**Puma Energy**"). Puma Energy's focus is in the oil storage and distribution business and, in particular, it is responsible for the storage, transport and retail distribution of large quantities of oil products which by their nature present such potential environmental risks. Through IWL Holding BV (Netherlands) (together with its subsidiaries, the "**Impala Terminals**

Group"), Trafigura's bulk commodity terminals and warehousing business is responsible for extensive terminals, warehousing facilities and blending operations as well as the operation of a major deep water terminal, which similarly poses potential environmental hazards, as does DT Group, an indirect subsidiary of the Company, which has interests in shipping, trucking and recycling and among its other activities is involved in the transport of bitumen.

In addition, its mining activities are subject to environmental hazards through the processes and chemicals used in traditional extraction and production methods, environmental hazards may exist on Trafigura's owned or leased properties or at those of the industrial activities in which it holds an interest, or may be encountered while its products are in transit. Nyrstar faces additional environmental risks both through its mining operations as discussed below, but also in its smelting operations where the economics of such operations are reliant in part on the prices achievable for the marketable by-products of smelting. Nyrstar generates large quantities of by-products such as sulfur dioxide gas in its zinc and lead production process, as well as solid residues with zinc, lead, copper, silver, gold and other minor metal values. In order to maximise recovery of resource components, minimise emissions and comply with its environmental commitments, it processes these by-products into forms that facilitate further metals recovery or render them suitable for sale to external parties.

Damage to refineries, bulk storage depots, offshore mooring systems or vessels carrying oil or to a facility where it is stored could lead to a spill, causing environmental damage with significant clean-up or remediation costs and legal costs.

Trafigura, including through its acquisition of the Nyrstar Operating Business, also owns mining assets. The processes and chemicals used in traditional extraction and production methods in respect of such mining assets as well as the engineering design of its mining infrastructure (e.g. tailing dams) are subject to environmental hazards. In addition, the storage of tailings at Trafigura's industrial assets may present a risk to the environment, property and persons. There remains a risk of leakage from or failure of Trafigura's tailings dams, as well as theft and vandalism during the operating life of the assets or after closure. Trafigura may be liable for losses associated with environmental hazards, have its licences and permits withdrawn or suspended or may be forced to undertake extensive remedial clean-up action or to pay for government-ordered remedial clean-up actions, even in cases where such hazards have been caused by any previous or subsequent owners or operators of the property, by any past or present owners of adjacent properties, by independent third party contractors providing services to Trafigura or by acts of vandalism by trespassers. Any such losses, withdrawals, suspensions, actions or payments may have a material adverse effect on Trafigura's business, results of operations and financial condition.

Estimates of ore reserves are based on certain assumptions, and changes in such assumptions could lead to reported ore reserves being restated at a lower level.

The value of Trafigura's mining activities is linked to its ore reserves. Trafigura's recoverable reserves decline as the commodities are extracted. These reserves represent the estimated quantities of minerals that the Group believes could be mined, processed, recovered and sold at prices sufficient to cover the estimated future total costs of production, remaining investment and anticipated additional capital expenditures. For as long as Trafigura continues to own its respective mining assets, its future profitability and operating margins depend partly upon its ability to access mineral reserves that have geological characteristics enabling mining at competitive costs either by conducting successful exploration and development activities or by acquiring properties containing economically recoverable reserves. Replacement reserves may not be available when required or, if available, may not be of a quality capable of being mined at costs comparable to existing mines. Trafigura's mining operations utilise the services of appropriately qualified experts to ascertain and verify the quantum of reserves and resources including ore grade and other geological characteristics under relevant global standards for measurement of mineral resources.

Resource and reserve information is based on engineering, economic and geological data assembled and analysed by third parties. Estimates as to both quantity and quality are periodically updated to reflect extraction of commodities and new drilling or other data received. There are numerous uncertainties inherent in estimating quantities and qualities of reserves and costs to mine, including many factors beyond Trafigura's and Nyrstar's control. Estimates of reserves necessarily depend upon a number of variable factors and assumptions, all of which may vary considerably from actual results.

Further, mineral resource estimates are based on concentrations or occurrences of minerals that are judged to have reasonable prospects for economic extraction, but for which the economics of extraction cannot be assessed, whether because of insufficiency of geological information or lack of feasibility analysis, or for which economic extraction cannot be justified at the time of reporting. Consequently, mineral resources are of a higher risk and are less likely to be accurately estimated or recovered than mineral reserves.

Assumptions that are valid at the time of estimation may change significantly when new information becomes available. This may, ultimately, result in the reserves or resources needing to be restated. Such changes in reserves or resources could also impact depreciation and amortisation rates, asset carrying values, deferred stripping calculations and provisions for close down, restoration and environmental clean-up costs. If the prices of the commodities produced by Trafigura and/or Nyrstar decrease, or if there are adverse changes in TCs, foreign exchange rates or other variables, certain of the Group's reserves which are currently classified as proved or probable may cease to be classified as recoverable as they become uneconomic to mine. In addition, changes in operating, capital or other costs may have the same effect by rendering certain mineral reserves or resources uneconomic to mine in the future. Should such reductions occur, further material write downs of its investment in mining properties or the discontinuation of development or production might be required, and there could be material delays in the development of new projects, increased net losses and reduced cash flow.

Trafigura is subject to risks relating to the processing, storage and transportation of its commodities.

Trafigura relies on a network of processing, transportation and storage facilities that are subject to numerous risks and hazards. If any of these risks materialise Trafigura's business, results of operations and financial condition could be materially adversely affected.

Trafigura's processing and storage facilities, which include oil terminals, refineries, tank farms and ore processing plants, are subject to risks and hazards, including accidental environmental damage, technical failure, vandalism and terrorism. In addition, Trafigura also depends upon seaborne freight, rail, trucking, pipeline, overland conveyor and other systems to deliver its commodities to market. Disruption of these transport services due to weather-related problems, key equipment or infrastructure failures, strikes, maritime disaster or other events could temporarily impair Trafigura's ability to supply its commodities to its customers and thus could adversely affect Trafigura's operations.

Transportation and storage of crude oil and oil products involves significant hazards that could result in fires, explosions, spills, maritime disaster and other unexpected or dangerous conditions. The occurrence of any of these events could result in a material adverse effect, either directly or indirectly, through resulting damages, claims and awards, remediation costs or negative publicity on Trafigura's business.

In addition, the vessels Trafigura uses to transport its products may be exposed to a variety of natural calamities during operations, including violent storms, tidal waves, rogue waves and tsunamis. Any of these natural calamities could result in Trafigura's vessels grounding, sinking, or colliding with other vessels or property, or the loss of life. If one of the vessels suffers damage, in addition to the potential loss of its cargo, it would need to be repaired, and the costs relating to such losses or repairs may not be covered (either in part or in full) by the insurance policies that are in place. The costs of such repairs are unpredictable and could be substantial. In addition, vessels will require general repair and maintenance from time to time. The loss of earnings while the vessels are being repaired and repositioned, the cost of arranging for alternative transport, as well as the actual cost of such repairs, could adversely affect Trafigura's business and results of operations. Furthermore, the vessels Trafigura uses to transport its products may be exposed to piracy, terrorist attacks and other events beyond its control. These events could result in adverse effects to Trafigura's business as a result of seizure of its cargoes and disruption to its customers' or suppliers' business. While Trafigura has procured insurance for its operations against these types of risks, no insurance can compensate for all potential losses and there can be no assurance that the insurance coverage Trafigura has will be adequate or that its insurers will pay a particular claim. As is the standard for policies of this type, Trafigura's insurance policies do not cover risks arising from damage caused by wear and tear to the vessels that it owns directly or through joint ventures. In the event of damage to, or the loss of, a vessel or vessels and/or their cargoes, lack of adequate insurance coverage may have a material adverse effect on Trafigura's business and results of operations.

Industrial activities are exposed to an increase in operating costs, including as a result of increased energy costs or shortages of equipment, spare parts and labour.

In relation to Trafigura's industrial activities, Trafigura's main production expenses include transportation costs, personnel expenses, maintenance and repairs, raw materials, energy and contractor expenses. Increased costs could arise from a number of factors which are beyond Trafigura's control, including: (i) increased fuel costs as well as the costs of other consumables, electricity, transport or site contractors; or (ii) increased processing or storage costs for such commodities.

In particular, electricity costs represent a very significant part of Nyrstar's production costs, especially in relation to the operation of smelters. Increases in energy, particularly electricity, prices would significantly increase Nyrstar's production costs and reduce its margins. Nyrstar attempts to limit its exposure to short term energy price fluctuations through forward purchases, long term contracts and participation in energy purchasing consortia. Further, Nyrstar is dependent on a limited number of suppliers for zinc and lead concentrates. Nyrstar is partially dependent on the supply of zinc and lead secondary feed materials. A disruption in supply could have a material adverse effect on Nyrstar's production levels and financial results. Unreliable energy supply at any of the mining and smelting operations requires appropriate emergency supply or will result in significant ramp up costs after a major power outage.

Further, shortages of certain equipment, spare parts or specialised labour may increase the costs of Trafigura's mining operations as a result of equipment, spare parts or labour becoming more expensive due to increased demand and tight supply. Such shortages may also cause delays to, and quality issues in respect of, Trafigura's operations either as a result of equipment used in Trafigura's operations being temporarily unavailable or not being available at all or there being insufficient resources to operate equipment or maintain production at the optimum capacity. Any resulting increase in costs or production delays could have a material adverse effect on Trafigura's business, results of operations and financial condition.

Trafigura is reliant on third parties and non-controlled entities to source the majority of the commodities purchased by its trading operations.

Trafigura purchases a minority portion of the physical commodities sold by its trading operations from its controlled industrial operations and associates. The remainder of the commodities sourced by its trading operations are purchased from third party suppliers or entities in which Trafigura may have a minority stake. Trafigura is exposed to both price and supply risks with respect to commodities sourced from third parties and entities in which it holds a minority stake, including joint ventures and non-controlled associated entities. The supply agreements between Trafigura and such third parties or non-controlled entities range from short-term spot contracts to multiple years in duration and have historically been renewed by Trafigura and the suppliers on commercially acceptable terms. However, in general, these companies have no obligation to renew their supply agreements. Trafigura may not be able to compel the relevant company to enter into or renew a supply agreement with it in cases where Trafigura does not own 100 per cent. of the company or where related party transaction minority shareholder approval requirements apply. Trafigura relies on these agreements to source some of its key commodities and any termination or failure to renew such agreements at the end of their terms could have an adverse effect on the Trafigura's business, results of operations and financial condition.

Any increases in Trafigura's purchase price relative to the price at which Trafigura trades a commodity could adversely affect Trafigura's margins. Trafigura's business, results of operations, financial condition and prospects could be materially adversely impacted if it is unable to continue to source required volumes of commodities from its suppliers on reasonable terms or at all.

Any disruptions in the supply of such products by factors such as weather and other natural disasters, insolvency or business failure of its third party suppliers, unexpected maintenance problems, damage to production sites, collapse of mines, labour disruptions and changes in laws and regulations could adversely affect Trafigura's margins. Trafigura's business, results of operations, financial condition and prospects could be materially adversely impacted if it is unable to continue to source the required volumes of commodities from its third party suppliers on reasonable terms, without interruption, or at all.

Trafigura's trading activities require access to significant amounts of freight, storage, infrastructure and logistics support and Trafigura is exposed to increases in the costs, and the availability, thereof.

Trafigura's trading activities entail shipments of commodities in large quantities, often by ocean-going transport. Trafigura often competes with other producers, purchasers or traders of commodities or other products for limited storage and berthing facilities at ports and freight terminals, which can result in delays in loading or unloading Trafigura's products and expose Trafigura to significant delivery interruptions. Limitations or interruptions in rail, shipping or port capacity could impede Trafigura's ability to deliver its products on time. In addition, increases in the costs of freight could adversely affect Trafigura's business, results of operations or financial condition.

Trafigura also requires significant storage capacity for its commodities, which it sources both through facilities in which Trafigura holds equity stakes and pursuant to rental agreements with, among others, oil terminals and tank farms and metal and other warehouses. Any decrease in Trafigura's ability to access its customary levels of capacity from these storage facilities or an increase in the price at which Trafigura can acquire storage capacity could have an adverse effect on Trafigura's business by forcing Trafigura to use storage facilities in less advantageous locations or at prices that make it less profitable for Trafigura to supply its customers.

Trafigura is exposed to the risk of delays in or failure to develop planned expansions or new projects.

Trafigura has some significant expansions planned for its existing operations and plans for certain new greenfield projects. Trafigura has undertaken certain expansion initiatives through the acquisition of various companies and the establishment of joint ventures, and as part of its strategy, Trafigura intends to continue pursuing a policy of measured expansion and development through asset acquisition.

Any future upward revisions in estimated project costs, delays in completing planned expansions, cost overruns, suspension of current projects or other operational difficulties after commissioning may have a material adverse effect on Trafigura's business, results of operations and financial condition, in turn requiring Trafigura to consider delaying discretionary expenditures, including capital expenditures, or suspending or altering the scope of one or more of its development projects.

In addition, there can be no assurance that Trafigura will be able to effectively manage the risks arising from expansion of its operations. Trafigura's expansion initiatives involve numerous risks, including but not limited to, the financial costs of investment in machinery and equipment, construction of new facilities and working capital requirements. As part of the acquisition process, Trafigura conducts business, legal and financial due diligence with the goal of identifying and evaluating material risks involved in any particular transaction. Despite Trafigura's efforts, Trafigura may be unsuccessful in ascertaining or evaluating all such risks. As a result, the intended advantages of any given acquisition may not be realised. If Trafigura fails to identify certain material risks from one or more acquisitions, its business, results of operations and financial position could be adversely affected.

Trafigura's current systems, procedures and controls may need to be expanded and strengthened to support Trafigura's future operations. Any failure of Trafigura to effectively manage its expansion plans or expanded operations could have a material adverse effect on Trafigura's business and results of operations.

Once complete, the results of these projects could differ materially from those anticipated by Trafigura and Trafigura's significant capital expenditures related to these projects may not be offset by cash flows or other benefits from these projects in the timeframe anticipated by Trafigura or at all.

From time to time, Trafigura considers the acquisition of complementary and synergistic businesses or assets. Business combinations entail a number of risks, including the ability of Trafigura to integrate effectively the businesses acquired with their existing operations (including the realisation of synergies, significant one-time write-offs or restructuring charges, difficulties in achieving optimal tax structures and unanticipated costs), problems with the retention of select personnel and issues arising from the co-ordination of sales and marketing efforts All of these may be exacerbated by the diversion of the Directors' attention away from other ongoing business concerns. These risks are magnified in the case of a sizeable transaction. This is particularly the case if the target company operates in an area ancillary to the Group's core business or substantially expands the Group's presence in a particular geographic or product market. While Trafigura believes it has the required expertise to manage the integration of such

large new businesses or is able to identify, hire and retain the necessary additional expertise required, no assurance can be given that any significant acquisition will realise the positive results originally envisioned or that such an acquisition will be successfully integrated within the Group.

In addition, although Trafigura does not currently have significant shares of the total market for commodities which it trades, further acquisitions to be made by Trafigura may be subject to certain approvals (for example, competition approvals) which may or may not be obtained. Trafigura may also be liable for the past acts, omissions or liabilities of companies or businesses it has acquired, which may be unforeseen or greater than anticipated at the time of the relevant acquisition. In addition, various factors could impact Trafigura's estimated synergies for potential acquisitions and have a material adverse impact on Trafigura's business, results of operations and financial condition.

Additionally, Nyrstar's growth strategy relies in part on the ramp-up of the Port Pirie Redevelopment and the restart and ramp-up of the Myra Falls and the Middle Tennessee Mines respectively. Delay, technical issues or cost overruns in these projects could adversely impact the original business cases which justified these projects and impact Nyrstar's financial position. These risks are being carefully managed by a dedicated technical/project team in smelting (including external resources where needed) and mining segments. All investments leverage internal know-how, "off the shelf" technology or a different application of an existing technology.

The success of Trafigura's acquisition and investment strategy depends on a number of factors, including: Trafigura's ability to identify suitable opportunities for investment or acquisition; whether Trafigura is able to complete an acquisition or investment agreement on terms that are satisfactory; the extent to which Trafigura is able to exercise control over the acquired company or business; the economic, business or other strategic objectives and goals of the acquired company or business compared to those of Trafigura; and Trafigura's ability to successfully integrate the acquired company or business with Trafigura's own business.

In addition, there is no assurance that the initiatives undertaken will result in increased revenues or cost cutting or other synergies commensurate with the investment costs. If Trafigura is unable to do so or cannot manage its costs, its business and profitability will be adversely affected as Trafigura will not able to recover the costs of its investment.

Trafigura holds some of its industrial assets through non-controlling stakes or joint ventures and strategic partnership arrangements.

Trafigura does not fully control some of its industrial investments. Although Trafigura has sought to take steps to protect its industrial activities where it does not exercise control, the boards of these companies may:

- have economic or business interests or goals that are inconsistent with or are opposed to those of Trafigura;
- exercise veto rights or take shareholders' decisions so as to block actions that Trafigura believes to be in its best interests and/or in the best interests of all shareholders;
- take action contrary to Trafigura's policies or objectives with respect to its investments or commercial arrangements; or
- as a result of financial or other difficulties, be unable or unwilling to fulfil their obligations under any joint venture or other agreement, such as contributing capital to expansion or maintenance projects.

Where projects and operations are controlled and managed by Trafigura's co-investors or where control is shared on an equal basis, Trafigura may provide expertise and advice, but it has limited or restricted ability to mandate compliance with Trafigura's policies and/or objectives. Trafigura may conduct business with these entities in which it has an economic interest; however, such business is conducted on an arm's length basis and in accordance with Trafigura's own policies and objectives. Nevertheless, such joint ventures may undertake business operations or make investment decisions which conflict with Trafigura's own businesses to Trafigura's detriment. Moreover, improper management or ineffective policies,

procedures or controls of a non-controlled entity could adversely affect the business, results of operations and financial condition of the relevant investment and, therefore, of Trafigura.

3. Regulatory, Legal and Other Risks

Trafigura may be subject to the laws of various countries imposing sanctions for conducting business with certain persons.

Certain countries in which Trafigura currently does business, or may consider doing business in the future, are or may become subject to various trade sanctions including, but not limited to sanctions administered by the United States Treasury Department's Office of Foreign Assets Control, and European Union, United Kingdom and United Nations sanctions programmes. While Trafigura employs dedicated resources to ensure that it is in compliance, there can be no assurance that Trafigura will not in the future enter into transactions that breach these sanctions. In the event of any non-compliance with applicable sanctions, Trafigura may be subject to the imposition of significant fines, as well as negative publicity and reputational damage. Any of the foregoing could result in a material adverse effect on Trafigura's business, results of operations and/or financial condition.

Due to the nature of its business and operations, Trafigura is exposed to the risks of fraud and corruption.

As a diversified sourcing, trading and distribution company conducting complex transactions globally, Trafigura is exposed to the risks of fraud and corruption.

Trafigura's trading operations are large in scale, which may make fraudulent or accidental transactions difficult to detect. In addition, some of Trafigura's trading and industrial activities take place in countries where corruption is generally understood to exist.

Trafigura seeks to comply fully with all applicable legislation such as the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and any applicable sanctions and has put in place internal control policies and external diligence and compliance policies. However, there can be no assurance that such procedures and established internal controls will adequately protect it against fraudulent and/or corrupt activity and such activity could have an adverse effect on Trafigura's business, reputation, results of operations, financial condition and/or prospects.Trafigura could also be affected indirectly by the fraudulent actions of its competitors which affect the commodities industry as a whole, which may lead to reduced liquidity. See "*Liquidity risk and a failure to obtain funds could limit Trafigura's ability to engage in desired activities and grow its business*."

Trafigura's reputation, including in the communities in which it operates, could deteriorate.

If it is perceived that Trafigura is not respecting or advancing the economic and social progress and safety of the communities in which it operates, Trafigura's reputation and shareholder value could be damaged, which could have a negative impact on its "licences to operate", its ability to secure new resources and its financial performance.

Some of Trafigura's current and potential trading and industrial activities are located in or near communities that may regard such operations as having a detrimental effect on their safety or environmental, economic or social circumstances. The consequences of negative community reaction could also have a material adverse impact on the cost, profitability, ability to finance or even the viability of an operation. Such events could lead to disputes with national or local governments or with local communities or any other stakeholders and give rise to material reputational damage. If Trafigura's operations are delayed or shut down as a result of political and community instability, its earnings may be constrained and the long-term value of its business could be adversely impacted. Even in cases where no action adverse to Trafigura is actually taken, the uncertainty associated with such political or community instability could negatively impact the perceived value of Trafigura's assets and industrial investments and, consequently, have a material adverse effect on Trafigura's financial condition.

There is an increasing level of public concern relating to the effect of mining and smelting on adjacent surroundings and the environment. Certain non-governmental organisations are vocal critics of the industries in which Trafigura operates. In particular, Nyrstar has in the past been subject to adverse publicity relating to, among other things, environmental issues and incidents relating to operating

equipment failures. While the Group seeks to operate in a socially responsible manner, adverse publicity, including that generated by non-governmental organisations, related to extractive industries generally or the Group's operations specifically, could have an adverse effect on the Group's reputation or results of operations or its relationships with the communities in which it operates.

Any change to Trafigura's ability to attract, retain and compensate key employees may impact its business.

Trafigura operates within a private company structure and as an employee-owned company. Any significant organisational or cultural change could result in certain key employees, whether skilled traders, or otherwise, leaving the Group. There are a number of other reasons why such personnel may leave, for example, an employee may leave Trafigura to go to a competitor, to start their own business, to retire or for other reasons.

Trafigura seeks to provide competitive compensation arrangements to retain and attract highly skilled personnel that are important to its business, including salaries and bonus and shareholding arrangements. While the Directors believe that Trafigura's current compensation arrangements are competitive and adequate to allow Trafigura to retain and attract the necessary calibre of employees, developments in the market or changes in internal culture may mean that these compensation payments may not be as effective as had been the case before and, as a result, Trafigura may need to change its compensation arrangements to make them more attractive to such employees which could be at an increased cost to Trafigura. The loss of any senior manager or other key personnel, as well as the inability to retain and/or attract new highly skilled personnel, could have a material adverse effect on Trafigura's business.

Trafigura is subject to a significant number of laws and regulations including extensive health, safety and environmental regulations and legislation.

Trafigura's trading and industrial activities are subject to extensive laws and regulations governing various matters across multiple jurisdictions. These include laws and regulations relating to taxation, competition, environmental protection, management and use of hazardous substances and explosives, management of natural resources, licences over resources owned by various governments, exploration, development of projects, production and post-closure reclamation, the employment of expatriates, labour and occupational health and safety standards, and historic and cultural preservation. Additionally, in many of the developing countries where Trafigura operates, the legal systems may not be mature and legal practice may not be developed, such that, in certain cases, there may be significant uncertainty as to the correct legal position as well as the possibility of laws changing or new laws and regulations being enacted, which has the potential to increase risk and compliance costs.

These laws and regulations may allow governmental authorities and private parties to bring lawsuits based upon damages to property and injury to persons resulting from the environmental, health and safety and other impacts of Trafigura's past and current operations, and could lead to the imposition of substantial fines, penalties, other civil or criminal sanctions, the curtailment or cessation of operations, orders to pay compensation, orders to remedy the effects of violations and/or orders to take preventative steps against possible future violations. Moreover, the costs associated with compliance with these laws and regulations are substantial. More stringent enforcement or restrictive interpretation of current laws and regulations by governmental authorities or rulings or clearances obtained from such governmental authorities could cause additional expenditure (including capital expenditure) to be incurred or impose restrictions on or suspensions of Trafigura's operations and delays in the development of its properties.

Trafigura's subsidiaries and the companies in which Trafigura holds investments are generally required, under applicable laws and regulations, to seek governmental licences, permits, authorisations, concessions and other approvals in connection with their activities. Obtaining the necessary governmental permits can be a particularly complex and time-consuming process and may involve costly undertakings. The duration and success of permit applications are contingent on many factors, including those outside Trafigura's control. Failure to obtain or renew a necessary permit could mean that such companies would be unable to proceed with the development or continued operation of a storage facility, mine or project, which, in turn, may have a material adverse effect on Trafigura's business, results of operations, financial condition and prospects.

In addition, the enactment of new laws and regulations and changes to existing laws and regulations (including, but not restricted to, environmental laws, the imposition of higher licence fees, mining and

hydrocarbon royalties or taxes, financial markets), compliance with which could be expensive or onerous, could also have a material adverse impact on Trafigura's ability to operate its business and/or the profitability of its industrial investments. For example, on 1 January 2020, the International Maritime Organisation ("**IMO**") will implement a new regulation under which ships will have to use marine fuels with a sulphur content of no more than 0.50 per cent. ("**IMO 2020**"). Compliance with IMO 2020, through sourcing new and alternative fuels for its ships, may increase the costs of Trafigura's trading operations and have a negative impact of Trafigura's results of operations.

The methods of transportation used by Trafigura's trading operations in order to deliver commodities to customers around the world depend heavily on fossil fuels. Increasing regulation of greenhouse gas emissions, including the progressive introduction of carbon emissions trading mechanisms and tighter emission reduction targets in numerous jurisdictions in which Trafigura operates is likely to raise energy costs and costs of production in the future. Regulation of greenhouse gas emissions in the jurisdictions of Trafigura's major customers and in relation to international shipping could also have a material adverse effect on the demand for Trafigura's products.

Moreover, numerous governmental permissions, approvals, licenses and leases are required for Trafigura's operations. These permissions, approvals, licenses and leases are subject, in certain circumstances or on the occurrence of certain events, to modification, renewal or revocation. Nyrstar is required to prepare and present to national, state or local authorities data pertaining to the anticipated effect or impact that any proposed exploration, mining or production activities may have upon the environment. Compliance with environmental, health and safety laws and regulations requires ongoing expenditure and considerable capital commitments. In addition, because many of Nyrstar's sites have been operating in their current capacity for relatively long periods of time, including during periods when environmental, health and safety laws and regulations were not as stringent as they are today, they may incur relatively high compliance costs. Furthermore, Nyrstar has operations in various jurisdictions, including the European Union and Australia, that may be subject to national, regional or local laws, regulations, taxes and policies aimed at limiting or reducing greenhouse gas emissions. The combined impact of direct and indirect greenhouse gas related costs across Nyrstar's business could have a material adverse effect on Nyrstar's business, results of operations or financial condition. Further, Nyrstar may be required to change operations, reduce production capacity or make additional investments or increase tax payments to adapt to new or amended environmental laws and regulations, which could also have a material adverse effect on Nyrstar's business, results of operations or financial condition.

Furthermore, the regulations to which Trafigura is subject differ from one jurisdiction to the other, as may the implementation or interpretation of seemingly similar regulations. Moreover, these regulations are often highly complex and are subject to changes in both substance and interpretation. In particular, areas such as taxes (and especially VAT), export and import duties and quotas and environmental compliance are characterised by a high degree of complexity. Changes in investment policies or shifts in the prevailing political climate in any of the countries in which Trafigura operates, buys from or sells to, including through Nyrstar, could result in the introduction of increased government regulations, including embargos with respect to, among other things:

- price controls;
- export, import and throughput controls, duties, tariffs and quotas;
- mining duties and royalties;
- income, withholding, VAT and other taxes;
- electricity and energy supply;
- environmental legislation;
- foreign ownership restrictions;
- foreign exchange and currency controls;
- financial, commercial or disclosure rules;
- labor and welfare benefit policies; and
- land and water use.

A number of countries, including Australia, Canada, Brazil, China, India, Mexico and Russia are considering or have recently introduced or increased the level of duties they impose on the mining industry. While the recent duties imposed in Canada and Mexico have not been material, it is possible that any future changes could have a material adverse impact on Nyrstar's, operations.

Trafigura is exposed to litigation risk.

Trafigura conducts its operations globally in a wide variety of jurisdictions and may potentially face litigation in any of them, including governmental or regulatory investigations or class actions. Damages or penalties claimed under any litigation are difficult to predict, and may be material. The legal infrastructure in certain of these jurisdictions may be less developed than in others and the legal process may be more uncertain or subject to extensive delay.

While Trafigura will assess the merits of each lawsuit and defend itself accordingly, it may be required to incur significant expenses or devote significant resources to defending itself against such litigation and the conduct of such defence may be a distraction for senior management from the running of the business. In addition, adverse publicity surrounding such claims may have a material adverse effect on Trafigura's business, prospects, financial condition and results of operations. The outcome of such litigation if adversely determined may materially impact Trafigura's business, results of operations or financial condition.

Social, economic and other risks in the markets where Trafigura operates may cause disruptions to its business.

Through the geographic diversity of its operations, Trafigura is exposed to risks of political or other civil unrest, strikes, war and economic and other forms of instability, such as natural disasters, epidemics, widespread transmission or communicable or infectious diseases, terrorist attacks and other events beyond its control that may adversely affect local economies, infrastructure and livelihoods.

These events could result in disruption to Trafigura's, its customers' or suppliers' businesses and seizure of, or damage to, any of their cargoes or assets. Such events could also cause the destruction of key equipment and infrastructure (including infrastructure located at or serving Trafigura's industrial activities as well as the infrastructure that supports the freight and logistics required by Trafigura's trading operations). These events could also result in the partial or complete closure of particular ports or significant sea passages, such as the Suez or Panama canals or the Straits of Hormuz, potentially resulting in higher costs, congestions of ports or sea passages, vessel delays or cancellations on some trade routes. Any of these events could adversely impact Trafigura's business and results of operations.

Trafigura is subject to risks relating to product safety and dangerous goods regulations.

Products sold by Trafigura are in many cases covered by national and international product safety and dangerous goods regulations. In some instances, product safety regulations (for example, the European Union ("**EU**") chemicals legislation and EU regulation concerning the Registration, Evaluation, Authorisation & Restriction of Chemicals (REACH)) oblige manufacturers and importers to register their products and to regularly monitor and evaluate the risks and hazards of substances (chemicals, metals, etc.) to protect humans and the environment from harm during handling, storage and use. Any failure in complying with these obligations could result in a delay of Trafigura's product delivery, a loss of insurance coverage, business interruption on the customer side, administrative or criminal sanctions and, in the extreme, banning (temporarily) from a marketplace. Such events could have a material impact on the local or global demand, reducing Trafigura's trading opportunities for such a product, or at least increase the handling costs while shipping and placing the product in the market, all of which could have a material adverse effect on Trafigura's reputation, business, results of operations and financial condition.

Trafigura relies on its financial, accounting, trading and other data processing information systems to conduct its business.

Trafigura's software applications for areas such as traffic, accounting and finance are primarily based on integrated standard components. Trafigura's key business processes rely on in-house developed modules and are regularly adapted to suit its business needs. Trafigura has duplicated data centres on the outskirts of London, with further data centres providing local services in Asia and in North America. If any of these systems does not operate properly or is disabled, Trafigura could suffer, among other things, financial loss, a disruption of its business, liability to its counterparties, regulatory intervention or reputational damage.

The industries in which Trafigura operates are subject to a wide range of risks as described elsewhere in this section, not all of which can be covered, adequately or at all, by Trafigura's insurance programme.

Trafigura has a broad insurance programme in place which provides coverage for operations at a level believed by the Directors to be appropriate for the associated risks. Such insurance protection is maintained with leading international insurance providers and includes coverage for physical loss and damage to owned vessels and kidnap and ransom, as well as third party liability, including for pollution. However, although Trafigura's insurance is intended to cover the majority of the risks to which Trafigura is exposed, it cannot account for every potential risk associated with its operations. Adequate coverage at reasonable rates is not always commercially available to cover all potential risks and no assurance can be given that, where available, such coverage would be sufficient to cover all loss and liability to which Trafigura may be exposed. The occurrence of a significant adverse event not fully or partially covered by insurance could have a material adverse effect on Trafigura's business, results of operations and financial condition.

Trafigura's profitability may be affected by changes in tax regimes and certain special tax incentives.

Trafigura's operations in various countries are subject to different tax regimes. Changes in local tax regulations, or the interpretation thereof, might adversely affect Trafigura's business, results of operations and/or financial condition.

Trafigura is owned by its management and key senior employees.

Trafigura is exclusively owned by its management and key senior employees. As a private company with no equity listing Trafigura is not subject to the extensive laws and regulations relating to corporate governance and transparency applied to publicly owned companies or by companies with equity listings on major stock exchanges. While Trafigura applies a prudent corporate governance model and believes that it is transparent in its dealings with its investors and other stakeholders, such as its banking group, its obligations in this regard are potentially less transparent than those legal and regulatory regimes associated with public companies.

The Issuer has requested a derogation letter in respect of the financial statements included in this Base Prospectus, so that the separate financial statements of TPTE and TTL are not included in this Base Prospectus

The Issuer has applied to the Central Bank of Ireland requesting the omission of each of TPTE and TTL's (as subsidiary Guarantors) individual financial statements from this Base Prospectus and the Central Bank of Ireland has granted such omission request. As all of the Group's operations are consolidated under TGPL, it is the Group's view that the inclusion of the consolidated Group Financial Statements provides substantial information about the Group's revenues and earnings by the Group's operating divisions and the geographic areas in which the Group operates, which reflects how the Group manages its business. The Group believes this is the information investors require to make an informed assessment of the assets and liabilities, financial position, profit and losses and prospects of the Issuer and the Guarantors, and that the inclusion of separate financial statements of each subsidiary Guarantor would not provide additional information which would materially affect such an assessment. Moreover, the inclusion of TPTE and TTL as guarantors primarily ensures that the Notes remain pari passu with the Group's bank facilities which also include these entities as guarantors.

Risks relating to the Notes

4. Risks related to the market generally.

Set out below is a brief description of certain market risks, including liquidity risk, exchange rate risk, interest rate risk and credit risk:

The secondary market generally

The Notes may have no established trading market when issued, and one may never develop. If a market does develop, it may not be liquid. Therefore, investors may not be able to sell their Notes easily or at prices that will provide them with a yield comparable to similar investments that have a developed secondary market. This is particularly the case for Notes that are especially sensitive to interest rate,

currency or market risks, are designed for specific investment objectives or strategies or have been structured to meet the investment requirements of limited categories of investors. These types of Notes generally would have a more limited secondary market and more price volatility than conventional debt securities. In addition, liquidity may be limited if the Issuer makes large allocations to a limited number of investors. Illiquidity may have a severely adverse effect on the market value of Notes.

Exchange rate risks and exchange controls

The Issuer will pay principal and interest on the Notes in the Specified Currency. This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit (the "**Investor's Currency**") other than the Specified Currency. These include the risk that exchange rates may significantly change (including changes due to devaluation of the Specified Currency or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the Specified Currency would decrease (1) the Investor's Currency-equivalent yield on the Notes, (2) the Investor's Currency-equivalent value of the principal payable on the Notes and (3) the Investor's Currency-equivalent market value of the Notes.

Government and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate. As a result, investors may receive less interest or principal than expected, or no interest or principal.

Interest rate risks

The price of the Notes may be affected by any changes in the market interest rates. For example, should the market interest rates increase, the price of the Notes would typically fall and should the market interest rates decline, the price of the Notes would typically increase. Noteholders should be aware that any detrimental fluctuations in the applicable market interest rates could adversely affect the value of the Notes.

Legal investment considerations may restrict certain investments

The investment activities of certain investors are subject to legal investment laws and regulations, or review or regulation by certain authorities. Each potential investor should consult its legal advisers to determine whether and to what extent (1) Notes are legal investments for it, (2) Notes can be used as collateral for various types of borrowing and (3) other restrictions apply to its purchase or pledge of any Notes. Financial institutions should consult their legal advisers or the appropriate regulators to determine the appropriate treatment of Notes under any applicable risk-based capital or similar rules.

The United Kingdom’s Withdrawal from the European Union

On 31 January 2020 the United Kingdom ceased to be a member state of the European Union. The United Kingdom has now entered a transition period under 31 December 2020 (or such later date as may be agreed between the United Kingdom and the European Union), during which European Union law will continue to apply to the United Kingdom (the “**Transition Period**”). Once the Transition Period has ended, investors should be aware that United Kingdom law may diverge from European Union law. As at the date of this Base Prospectus, it is not possible for the Issuer to predict (i) the extent or materiality of any such divergence; (ii) the precise impact of any such divergence on the regulatory environment in which the Issuer and the Group operates; (iii) the impact of any such divergence on the Terms and Conditions of any Notes issued under the Programme; or (iv) the impact on the regulatory treatment of an investor holding any Notes issued under the Programme. Investors are urged to make their own assessment, and seek independent advice, regarding the impact of the UK’s exit from the European Union on their acquisition and/holding of any Notes issued under the Programme.

5. Risks related to the Notes and the Guarantee generally.

Set out below is a brief description of certain risks relating to the Notes and the Guarantee generally:

Notes may be redeemed prior to maturity

In the event that the Issuer or the Guarantors would be obliged to increase the amounts payable in respect of any Notes due to any withholding or deduction for or on account of, any present or future taxes, duties,

assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of (in the case of the Issuer) Luxembourg, (in the case of TTL) the State of Delaware or (in the case of TGPL or TPTE) Singapore or any political subdivision thereof or any authority therein or thereof having power to tax, the Issuer may redeem all outstanding Notes in accordance with the Conditions.

Modification and Waivers

The Conditions contain provisions for calling meetings of Noteholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Noteholders including Noteholders who did not attend and vote at the relevant meeting and Noteholders who voted in a manner contrary to the majority.

Change of law

The Conditions are based on English law in effect as at the date of issue of the relevant Notes. No assurance can be given as to the impact of any possible judicial decision or change to English law or administrative practice after the date of issue of the relevant Notes.

Neither the Issuer nor the Notes are rated

Investors should not assume or infer that any rating ascribed to the Issuer or any of its indebtedness or credit would apply to the Notes. No corporate public rating has been assigned to the Issuer or the Issuer's indebtedness and the Issuer does not currently intend to apply for any such rating.

Investors in the Notes must rely on clearing system procedures

Because the Global Notes are held by or on behalf of Euroclear and/or Clearstream, Luxembourg and/or any other clearing system, investors will have to rely on their procedures for transfer, payment and communication with the Issuer and/or the Guarantors. The Notes will be represented by the Global Notes except in certain limited circumstances described in the Permanent Global Note. The Global Notes will be deposited with a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other clearing system. Except in certain limited circumstances described in the Permanent Global Note, investors will not be entitled to receive definitive Notes. Euroclear and/or Clearstream, Luxembourg and/or any other clearing system will maintain records of the beneficial interests in the Global Notes. While the Notes are represented by the Global Notes, investors will be able to trade their beneficial interests only through Euroclear and/or Clearstream, Luxembourg and/or any other clearing system.

The Issuer and the Guarantors will discharge their payment obligations under the Notes by making payments to or to the order of the common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other clearing system for distribution to their account holders. A holder of a beneficial interest in a Global Note must rely on the procedures of Euroclear and/or Clearstream, Luxembourg and/or any other clearing system to receive payments under the Notes. The Issuer and the Guarantors have no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Notes.

Holders of beneficial interests in the Global Notes will not have a direct right to vote in respect of the Notes. Instead, such holders will be permitted to act only to the extent that they are enabled by Euroclear and/or Clearstream, Luxembourg and/or any other clearing system to appoint appropriate proxies.

Denominations

In relation to any issue of Notes which have a denomination consisting of the minimum Specified Denomination plus an integral multiple of another smaller amount in excess thereof, it is possible that the Notes may be traded in amounts in excess of the minimum Specified Denomination that are not integral multiples of the minimum Specified Denomination (or its equivalent). In such a case a Noteholder who, as a result of trading such amounts, holds a principal amount of less than the minimum Specified Denomination in its account with the clearing system at the relevant time may not receive a Definitive Note in respect of such holding (should Definitive Notes be printed) and would need to purchase a principal amount of Notes such that its holding amounts to the minimum Specified Denomination.

If Definitive Notes are issued, Noteholders should be aware that Definitive Notes which have a denomination that is not an integral multiple of the minimum Specified Denomination may be illiquid and difficult to trade.

Liquidity risk and a failure to obtain funds could affect the Group's ability to meet repayments to Noteholders

Liquidity risk (as detailed in "*Liquidity risk and a failure to obtain funds could limit Trafigura's ability to engage in desired activities and grow its business*") could impact Trafigura's ability to make principal or interest payments when due on the Notes. In the event that Trafigura does not have sufficient available liquidity or is unable to refinance the Notes in the long-term and short-term debt markets, the ability of Trafigura to make principal or interest payments due on the Notes may be adversely impacted. As of 31 March 2019, Trafigura had USD 58.81 billion of credit facilities available to it, and USD 16.64 billion of these credit facilities had not been utilised and were available.

In addition, there can be no assurance that a material deterioration in Trafigura's operating results would not lead to violations of Trafigura's existing sources of liquidity, namely borrowings under various short-term and long-term bank and asset-backed facilities and the issuance of notes in the debt capital markets, which could have a material adverse effect on the financial position and prospects of Trafigura, and which could lead to Trafigura being unable to make the required payments to Noteholders pursuant to the Notes.

At the time of maturity of any other debt that Trafigura may incur, if Trafigura does not have sufficient cash flows from operations and other capital resources to pay its debt obligations, or to fund its other liquidity needs, it may be required to refinance its indebtedness. If Trafigura is unable to refinance its indebtedness or obtain such refinancing on terms acceptable to it, Trafigura may be forced to sell assets, or raise additional debt or equity financing in amounts which could be substantial. The type, timing and terms of any future financing will depend on Trafigura's cash needs and the prevailing conditions in the financial markets. Trafigura cannot guarantee that it would be able to accomplish any of these measures in a timely manner or on commercially reasonable terms, if at all and there can be no guarantee that the refinancing of such indebtedness, and the terms thereof, would not negatively impact Trafigura's ability to meet its obligations under the Notes.

6. Risks related to the structure of a particular issue of Notes.

A wide range of Notes may be issued under the Programme. A number of these Notes may have features which contain particular risks for potential investors. Set out below is a description of certain such features:

Notes subject to optional redemption by the Issuer

An optional redemption feature is likely to limit the market value of Notes. During any period when the Issuer may elect to redeem Notes, the market value of those Notes generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period.

The Issuer may be expected to redeem Notes when its cost of borrowing is lower than the interest rate on the Notes. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Notes being redeemed and may only be able to do so at a significantly lower rate. Potential investors should consider reinvestment risk in light of other investments available at that time.

Notes issued at a substantial discount or premium

The market values of securities issued at a substantial discount or premium to their nominal amount tend to fluctuate more in relation to general changes in interest rates than do prices for conventional interest-bearing securities. Generally, the longer the remaining term of the securities, the greater the price volatility as compared to conventional interest-bearing securities with comparable maturities.

Inverse Floating Rate Notes

Inverse Floating Rate Notes have an interest rate equal to a fixed rate minus a rate based upon a reference rate such as EURIBOR. The market values of such Notes are typically more volatile than the market values of other conventional floating rate debt securities based on the same reference rate (and with

otherwise comparable terms). Inverse Floating Rate Notes are more volatile because an increase in the reference rate not only decreases the interest rate of the Notes but may also reflect an increase in prevailing interest rates, which further adversely affects the market value of these Notes.

Risks related to Notes which are linked to "benchmarks"

The London Interbank Offered Rate ("**LIBOR**"), the Euro Interbank Offered Rate ("**EURIBOR**") and other interest rates or other types of rates and indices which are deemed to be "benchmarks" are the subject of ongoing national and international regulatory reform. Following the implementation of any such potential reforms, the manner of administration of benchmarks may change, with the result that they may perform differently than in the past, or benchmarks could be eliminated entirely, or there could be other consequences which cannot be predicted. For example, on 27 July 2017, the UK Financial Conduct Authority announced that it will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021 (the "**FCA Announcement**"). The FCA Announcement indicates that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021. The potential elimination of the LIBOR benchmark or any other benchmark, or changes in the manner of administration of any benchmark, could require or result in an adjustment to the interest provisions of the Conditions or result in other consequences, in respect of any Notes linked to such benchmark (including but not limited to floating rate notes whose interest rates are linked to LIBOR). Any such consequence could have a material adverse effect on the value of and return on any such Notes.

Future unavailability or discontinuance of certain benchmark rates (for example LIBOR or EURIBOR) may adversely affect the value of and return on the Notes which are linked to or which reference any such benchmark rate.

Investors should be aware that if LIBOR, or any other benchmark, were discontinued or otherwise unavailable, the rate of interest on Floating Rate Notes which are linked to or which reference such benchmark will be determined for the relevant period by the fallback provisions applicable to such Notes. The Terms and Conditions of the Notes provide for certain fallback arrangements in the event that a published benchmark, such as LIBOR, (including any page on which such benchmark may be published (or any successor service)) becomes unavailable. With respect to certain Notes issued under this Base Prospectus, these fallback arrangements may require or result in adjustments to the interest calculation provisions of the Terms and Conditions of the Notes. Even prior to the implementation of any changes to any benchmark, or to the interest calculation provisions based on such benchmark, uncertainty as to the nature of alternative reference rates and as to potential changes to such benchmark may adversely affect the operation of such benchmark during the term of the relevant Notes, as well as potentially adversely affecting both the return on any Notes which are linked to or which reference such benchmark and the trading market for such Notes.

With respect to certain Notes issued under this Base Prospectus, in certain situations, including the relevant benchmark ceasing to be administered, where Screen Rate Determination is specified in the applicable Final Terms as the manner in which the rate of interest is to be determined, the fallback arrangements referenced in the preceding paragraph will include the possibility that:

(A) the relevant rate of interest (or, as applicable, component thereof) could be set or, as the case may be, determined by reference to an alternative rate determined by the Issuer after consultation with an Independent Adviser or, if the Issuer is unable to appoint an Independent Adviser, the Issuer; and

(B) in the case of Floating Rate Notes, an adjustment spread may be applied to such alternative rate by the Issuer after consultation with an Independent Adviser or, if the Issuer is unable to appoint an Independent Adviser, the Issuer, if such an adjustment spread is required to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as applicable) to investors as a result of the replacement of the relevant benchmark, provided that if the Issuer after consultation with an Independent Adviser or, if the Issuer is unable to appoint an Independent Adviser, the Issuer is unable to determine such adjustment spread or decides that no such adjustment spread is required then such alternative rate will apply without adjustment for all future interest periods,

in each such case, with the Issuer and any Independent Adviser acting in good faith and in a commercially reasonable manner, and all as more fully described in the Terms and Conditions of the Notes.

No consent of the Noteholders shall be required in connection with effecting any alternative rate. In addition, no consent of the Noteholders shall be required in connection with any other related adjustments and/or amendments to the Terms and Conditions of the Notes (or any other document) which are made in order to effect any alternative rate.

Any such consequences could have a material adverse effect on the value of and return on any such Notes. Moreover, any of the above matters or any other significant change to the setting or existence of any relevant rate could affect the ability of the Issuer to meet its obligations under the Floating Rate Notes or could have a material adverse effect on the value or liquidity of, and the amount payable under, the Floating Rate Notes. Investors should note that the Independent Adviser or the Issuer (as applicable) will have discretion to adjust the relevant alternative rate in the circumstances described above. Any such adjustment could have unexpected commercial consequences and there can be no assurance that, due to the particular circumstances of each Noteholder, any such adjustment will be favourable to each Noteholder. In addition, if an amendment is made to the Notes to change the reference rate/benchmark from LIBOR, or any other benchmark, to an alternative base rate, such amendment could have adverse tax consequence to certain holders.

Investors should consider all of these matters when making their investment decision with respect to the relevant Floating Rate Notes.

INFORMATION INCORPORATED BY REFERENCE

The following documents which have previously been published and have been filed with Euronext Dublin and the Central Bank shall be incorporated by reference in, and form part of, this Base Prospectus:

(a) the annual reports of Trafigura Group Pte. Ltd. for the years ended 30 September 2019 and 2018 (together, the "**Group Annual Reports**") (which include the audited consolidated financial statements of the Group (including the audit reports thereon and the notes thereto) for the financial years ended 30 September 2019 and 30 September 2018, respectively (together, the "**Group Financial Statements**"));

(b) the interim report of Trafigura Group Pte. Ltd. for the six month period ended 31 March 2020 (the "**Group Interim Report**") (which includes the unaudited consolidated financial statements of the Group for the six month period end 31 March 2020 (the "**Group Interim Financial Statements**")); and

(c) the audited financial statements of the Issuer (including the audit reports thereon and the notes thereto) for the financial years ended 30 September 2019 and 30 September 2018 (together, the "**Issuer Financial Statements**").

Such documents shall be deemed to be incorporated in, and form part of, this Base Prospectus, save that any statement contained in a document which is deemed to be incorporated by reference in this Base Prospectus shall be deemed to be modified or superseded for the purpose of this Base Prospectus to the extent that a statement contained herein modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Base Prospectus.

The Group Financial Statements, the Group Interim Financial Statements and the Issuer Financial Statements are available on the website of the Euronext Dublin.

https://www.ise.ie/debt_documents/Trafigura%20Group%20Pte%20Ltd%20-%202019%20Annual%20Report_0d8bb2e8-42c4-408d-862c-923c82f5e4d3.pdf

https://www.ise.ie/debt_documents/2018.12.10%20-%202018%20Trafigura%20Annual%20Report%20-%20Final_2752b398-747c-40dc-9ee2-a4f0bde8e60c.pdf

https://www.ise.ie/debt_documents/Trafigura%20Group%20Pte.%20Ltd.%20-%202020%20Interim%20Report_2dd74065-c7ab-47f3-887a-c52cfe831d74.pdf

https://www.ise.ie/debt_documents/Trafigura%20Funding%20S.A.%202019%20Financial%20Statements_0bc4428a-e73d-4170-8848-8c3d507299b0.pdf

https://www.ise.ie/debt_documents/Trafigura%20Funding%20SA%202018%20Annual%20Report_e1d12447-a104-40d4-858e-d3f5ea99572e.pdf

Copies of the documents incorporated by reference may be inspected, free of charge, during normal business hours at the offices of Trafigura Group Pte. Ltd. at 10 Collyer Quay, #29-00 Ocean Financial Centre, Singapore 049315. To the extent that only part of a document is incorporated by reference in this Base Prospectus, the non-incorporated part of such document is either not relevant to investors or is covered elsewhere in this Base Prospectus.

No websites referred to herein, or any information contained therein (except as otherwise specified herein), form part of this Base Prospectus and the Group does not accept any responsibility for any information contained in such websites.

FINAL TERMS AND DRAWDOWN PROSPECTUSES

In this section the expression "**necessary information**" means, in relation to any Tranche of Notes, the information necessary to enable investors to make an informed assessment of the assets and liabilities, financial position, profits and losses and prospects of the Issuer and the Guarantors and of the rights attaching to the Notes. In relation to the different types of Notes which may be issued under the Programme the Issuer and the Guarantors have included in this Base Prospectus all of the necessary information except for information relating to the Notes which is not known at the date of this Base Prospectus and which can only be determined at the time of an individual issue of a Tranche of Notes.

Any information relating to the Notes which is not included in this Base Prospectus and which is required in order to complete the necessary information in relation to a Tranche of Notes will be contained either in the relevant Final Terms or in a Drawdown Prospectus.

For a Tranche of Notes which is the subject of Final Terms, those Final Terms will, for the purposes of that Tranche only, supplement this Base Prospectus and must be read in conjunction with this Base Prospectus. The terms and conditions applicable to any particular Tranche of Notes which is the subject of Final Terms are the Conditions described in the relevant Final Terms as completed to the extent described in the relevant Final Terms.

The terms and conditions applicable to any particular Tranche of Notes which is the subject of a Drawdown Prospectus will be the Conditions as supplemented, amended and/or replaced to the extent described in the relevant Drawdown Prospectus. In the case of a Tranche of Notes which is the subject of a Drawdown Prospectus, each reference in this Base Prospectus to information being specified or identified in the relevant Final Terms shall be read and construed as a reference to such information being specified or identified in the relevant Drawdown Prospectus unless the context requires otherwise.

Each Drawdown Prospectus will be constituted either (1) by a single document containing the necessary information relating to the Issuer and the Guarantors and the relevant Notes or (2) by a registration document containing the necessary information relating to the Issuer and the Guarantors, a securities note containing the necessary information relating to the relevant Notes and, if necessary, a summary note.

FORMS OF THE NOTES

Each Tranche of Notes will initially be in the form of either a temporary global note (the "**Temporary Global Note**"), without interest coupons, or a permanent global note (the "**Permanent Global Note**"), without interest coupons, in each case as specified in the relevant Final Terms. Each Temporary Global Note or, as the case may be, Permanent Global Note (each a "**Global Note**"), will be deposited on or around the issue date of the relevant Tranche of the Notes with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system.

The relevant Final Terms will also specify whether United States Treasury Regulation §1.163-5(c)(2)(i)(C) (the "**TEFRA C Rules**") or United States Treasury Regulation §1.163-5(c)(2)(i)(D) (the "**TEFRA D Rules**") are applicable in relation to the Notes or, if the Notes do not have a maturity of more than 365 days, that neither the TEFRA C Rules nor the TEFRA D Rules are applicable.

Temporary Global Note exchangeable for Permanent Global Notes

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for a Permanent Global Note", then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for interests in a Permanent Global Note, without interest coupons, not earlier than 40 days after the issue date of the relevant Tranche of the Notes. No payments will be made under the Temporary Global Note unless exchange for interests in the Permanent Global Note is improperly withheld or refused.

Whenever any interest in the Temporary Global Note is to be exchanged for an interest in a Permanent Global Note, the Issuer shall procure (in the case of first exchange) the delivery of a Permanent Global Note to the bearer of the Temporary Global Note or (in the case of any subsequent exchange) an increase in the principal amount of the Permanent Global Note in accordance with its terms against presentation and (in the case of final exchange) presentation and surrender of the Temporary Global Note to or to the order of the Principal Paying Agent.

The principal amount of Notes represented by the Permanent Global Note shall be equal to the aggregate of the principal amounts specified in the Temporary Global Note **provided**, **however**, **that** in no circumstances shall the principal amount of Notes represented by the Permanent Global Note exceed the initial principal amount of Notes represented by the Temporary Global Note.

The Permanent Global Note will become exchangeable, in whole but not in part only and at the request of the bearer of the Permanent Global Note, for Bearer Notes in definitive form ("**Definitive Notes**") if the Final Terms specifies "in the limited circumstances described in the Permanent Global Note" and either of the following events occurs:

(a) Euroclear or Clearstream, Luxembourg or any other relevant clearing system terminates without a successor or announces an intention permanently to cease business; or

(b) any of the circumstances described in Condition 12 (*Events of Default*) occurs.

For the avoidance of doubt, Notes will only be issued with a minimum Specified Denomination and in integral multiples of another smaller amount in excess thereof if the relevant Final Terms specifies "in the limited circumstances described in the Permanent Global Note" in accordance with the paragraph above.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the Final Terms), in an aggregate principal amount equal to the principal amount of Notes represented by the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

Temporary Global Note exchangeable for Definitive Notes

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA C Rules are applicable or that neither the TEFRA C Rules or the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole but not in part, for Definitive Notes on the expiry of

such period of notice as is specified in the relevant Final Terms and not earlier than 40 days after the issue date of the relevant Tranche of the Notes.

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for Definitive Notes not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification as to non-U.S. beneficial ownership. Interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

Whenever the Temporary Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Final Terms), in an aggregate principal amount equal to the principal amount of the Temporary Global Note to the bearer of the Temporary Global Note against the surrender of the Temporary Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

In the event that a Temporary Global Note is exchanged for Definitive Notes, such Definitive Notes shall be issued in Specified Denomination(s) only. A Noteholder who holds a principal amount of less than the minimum Specified Denomination will not receive a Definitive Note in respect of such holding and would need to purchase a principal amount of Notes such that it holds an amount equal to one or more Specified Denominations. Such Definitive Notes may only be issued to be held in clearing systems if in denominations equal to EUR 100,000 (or equal to £100,000, as applicable) and integral multiples thereof.

Permanent Global Note exchangeable for Definitive Notes

If the relevant Final Terms specifies the form of Notes as being "Permanent Global Note exchangeable for Definitive Notes", then the Notes will initially be in the form of a Permanent Global Note which will be exchangeable in whole, but not in part, for Definitive Notes if the relevant Final Terms specifies "in the limited circumstances described in the Permanent Global Note" and either of the following events occurs:

(a) Euroclear or Clearstream, Luxembourg or any other relevant clearing system terminates without a successor or announces an intention permanently to cease business; or

(b) any of the circumstances described in Condition 12 (*Events of Default*) occurs.

For the avoidance of doubt, Notes will only be issued with a minimum Specified Denomination and in integral multiples of another smaller amount in excess thereof if the relevant Final Terms specifies "in the limited circumstances described in the Permanent Global Note" in accordance with the paragraph above.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the Final Terms), in an aggregate principal amount equal to the principal amount of Notes represented by the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

Terms and conditions applicable to the Notes

The terms and conditions applicable to any Definitive Note will be endorsed on that Note and will consist of the Conditions and the provisions of the relevant Final Terms which complete those terms and conditions.

The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "*Summary of Provisions Relating to the Notes while in Global Form*" below.

Legend concerning United States persons

In the case of any Tranche of Notes having a maturity of more than 365 days, any Global Notes as to which TEFRA D is applicable and any Definitive Notes (as defined herein) and any Coupons and Talons appertaining thereto will bear a legend to the following effect:

> "Any United States person who holds this obligation will be subject to limitations under the United States income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Internal Revenue Code."

TERMS AND CONDITIONS OF THE NOTES

The following is the text of the terms and conditions, which, as completed by Part A of the relevant Final Terms, will apply to each Tranche of Notes issued pursuant to this Base Prospectus.

In the case of any Tranche of Notes which are being (a) offered to the public in a Member State (other than pursuant to one or more of the exemptions set out in Article 1.4 of the Prospectus Regulation) or (b) admitted to trading on a regulated market in a Member State, the relevant Final Terms shall not amend or replace any information in this Base Prospectus. Subject to this, to the extent permitted by applicable law and/or regulation, the Final Terms in respect of any Tranche of Notes may supplement, amend or replace any information in this Base Prospectus. The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "Summary of Provisions Relating to the Notes while in Global Form" below.

1. **Introduction**

(a) ***Programme***: Trafigura Funding S.A. (the "**Issuer**") and Trafigura Group Pte. Ltd., Trafigura Trading LLC and Trafigura Pte Ltd (each a "**Guarantor**" and together, the "**Guarantors**") are party to a Euro Medium Term Note Programme (the "**Programme**") for the issuance of up to EUR 3,000,000,000 in aggregate principal amount of notes (the "**Notes**") unconditionally and irrevocably guaranteed on a joint and several basis by the Guarantors.

(b) ***Final Terms***: Notes issued under the Programme are issued in series (each a "**Series**") and each Series may comprise one or more tranches (each a "**Tranche**") of Notes. Each Tranche is the subject of the applicable final terms (the "**Final Terms**") which supplements these terms and conditions (the "**Conditions**"). The terms and conditions applicable to any particular Tranche of Notes are these Conditions as supplemented, amended and/or replaced by the relevant Final Terms. In the event of any inconsistency between these Conditions and the relevant Final Terms, the relevant Final Terms shall prevail.

(c) ***Trust Deed***: The Notes are subject to and have the benefit of an amended and restated trust deed dated 11 September 2020 (as further amended and/or supplemented and/or restated from time to time, the "**Trust Deed**") made between the Issuer, each Guarantor and Citicorp Trustee Company Limited (the "**Trustee**", which expression shall include all persons for the time being the trustee or trustees appointed under the Trust Deed).

(d) ***Paying Agency Agreement:*** The Notes are the subject of an amended and restated issue and paying agency agreement dated 28 February 2018 (as further amended and/or supplemented and/or restated from time to time, the "**Paying Agency Agreement**") between the Issuer, each Guarantor, the Trustee and Citibank N.A., London Branch (the "**Principal Paying Agent**", which expression includes any successor principal paying agent appointed from time to time in accordance with the Paying Agency Agreement in connection with the Notes) and the paying agents named therein (together with the Principal Paying Agent, the "**Paying Agents**", which expression includes any successor or additional paying agents appointed from time to time in accordance with the Paying Agency Agreement in connection with the Notes).

(e) ***The Notes***: All subsequent references in these Conditions to "**Notes**" are to the Notes which are the subject of the relevant Final Terms. Copies of the relevant Final Terms are available for inspection during normal business hours at the Specified Office of the Trustee and the Principal Paying Agent, the initial Specified Offices of which are set out below.

(f) ***Summaries***: Certain provisions of these Conditions are summaries of the Trust Deed, and the Paying Agency Agreement and are subject to their detailed provisions. The holders of the Notes (the "**Noteholders**") and the holders of the related interest coupons, if any, (the "**Couponholders**" and the "**Coupons**", respectively) are bound by, and are deemed to have notice of, all the provisions of the Trust Deed and the Paying Agency Agreement applicable to them. Copies of the Trust Deed and the Paying Agency Agreement are available for inspection

by Noteholders during normal business hours at the Specified Offices of each of the Paying Agents, the initial Specified Offices of which are set out below.

2. **Interpretation**

(a) ***Definitions***: In these Conditions the following expressions have the following meanings:

"**Accrual Yield**" has the meaning given in the relevant Final Terms;

"**Additional Business Centre(s)**" means the city or cities specified as such in the relevant Final Terms;

"**Additional Financial Centre(s)**" means the city or cities specified as such in the relevant Final Terms;

"**Authorised Signatory**" has the meaning given in the Trust Deed;

"**Business Day**" means:

(i) in relation to any sum payable in euro, a TARGET Settlement Day and a day on which commercial banks and foreign exchange markets settle payments generally in each (if any) Additional Business Centre; and

(ii) in relation to any sum payable in a currency other than euro, a day on which commercial banks and foreign exchange markets settle payments generally in London, in the Principal Financial Centre of the relevant currency and in each (if any) Additional Business Centre;

"**Business Day Convention**", in relation to any particular date, has the meaning given in the relevant Final Terms and, if so specified in the relevant Final Terms, may have different meanings in relation to different dates and, in this context, the following expressions shall have the following meanings:

(i) "**Following Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day;

(ii) "**Modified Following Business Day Convention**" or "**Modified Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day unless that day falls in the next calendar month in which case that date will be the first preceding day that is a Business Day;

(iii) "**Preceding Business Day Convention**" means that the relevant date shall be brought forward to the first preceding day that is a Business Day;

(iv) "**FRN Convention**", "**Floating Rate Convention**" or "**Eurodollar Convention**" means that each relevant date shall be the date which numerically corresponds to the preceding such date in the calendar month which is the number of months specified in the relevant Final Terms as the Specified Period after the calendar month in which the preceding such date occurred **provided**, **however**, **that**:

(A) if there is no such numerically corresponding day in the calendar month in which any such date should occur, then such date will be the last day which is a Business Day in that calendar month;

(B) if any such date would otherwise fall on a day which is not a Business Day, then such date will be the first following day which is a Business Day unless that day falls in the next calendar month, in which case it will be the first preceding day which is a Business Day; and

(C) if the preceding such date occurred on the last day in a calendar month which was a Business Day, then all subsequent such dates will be the last day which is

a Business Day in the calendar month which is the specified number of months after the calendar month in which the preceding such date occurred;

(v) "**No Adjustment**" means that the relevant date shall not be adjusted in accordance with any Business Day Convention;

"**Calculation Agent**" means the Principal Paying Agent or such other Person specified in the relevant Final Terms as the party responsible for calculating the Rate(s) of Interest and Interest Amount(s) and/or such other amount(s) as may be specified in the relevant Final Terms;

"**Calculation Amount**" has the meaning given in the relevant Final Terms;

"**Clearstream, Luxembourg**" means Clearstream Banking, S.A.;

"**Consolidated Net Earnings**" means, for a Measurement Period, the consolidated net income (or loss) of the Parent and the Subsidiaries for such period (taken as a cumulative whole), all determined in accordance with GAAP (without duplication) on a consolidated basis after deducting portions of income properly attributable to minority interests, if any, in the shares and surplus of Subsidiaries and excluding any net income (or loss) of SPE;

"**Consolidated Net Worth**" means, at any time:

(i) the total consolidated assets of the Parent which are shown as assets on a consolidated balance sheet of the Parent as of such time prepared in accordance with GAAP, after eliminating the assets of SPE,

Minus

(ii) the total consolidated liabilities of the Parent which are shown as liabilities on a consolidated balance sheet of the Parent as of such time prepared in accordance with GAAP, after excluding (i) the liabilities of SPE and (ii) for the avoidance of doubt, instruments classified as equity in accordance with GAAP in force prior to 1 January 2019;

"**Coupon Sheet**" means, in respect of a Note, a coupon sheet relating to the Note;

"**Day Count Fraction**" means, in respect of the calculation of an amount for any period of time (the "**Calculation Period**"), such day count fraction as may be specified in these Conditions or the relevant Final Terms and:

(i) when the 2000 ISDA Definitions are specified in the relevant Final Terms as being applicable:

(A) if "**Actual/Actual (ICMA)**" is so specified, means:

(1) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods normally ending in any year; and

(2) where the Calculation Period is longer than one Regular Period, the sum of:

i. the actual number of days in such Calculation Period falling in the Regular Period in which it begins divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and

ii. the actual number of days in such Calculation Period falling in the next Regular Period divided by the product of (1) the actual

number of days in such Regular Period and (2) the number of Regular Periods normally ending in any year;

(B) if "**Actual/365**" or "**Actual/Actual (ISDA)**" is so specified, means the actual number of days in the Calculation Period divided by 365 (or, if any portion of the Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period falling in a non-leap year divided by 365);

(C) if "**Actual/365 (Fixed)**" is so specified, means the actual number of days in the Calculation Period divided by 365;

(D) if "**Actual/360**" is so specified, means the actual number of days in the Calculation Period divided by 360;

(E) if "**30/360**" is so specified, means the number of days in the Calculation Period divided by 360 (the number of days to be calculated on the basis of a year of 360 days with 12 30-day months (unless (i) the last day of the Calculation Period is the 31st day of a month but the first day of the Calculation Period is a day other than the 30th or 31st day of a month, in which case the month that includes that last day shall not be considered to be shortened to a 30-day month, or (ii) the last day of the Calculation Period is the last day of the month of February, in which case the month of February shall not be considered to be lengthened to a 30-day month)); and

(F) if "**30E/360**" or "**Eurobond Basis**" is so specified means, the number of days in the Calculation Period divided by 360 (the number of days to be calculated on the basis of a year of 360 days with 12 30-day months, without regard to the date of the first day or last day of the Calculation Period unless, in the case of the final Calculation Period, the date of final maturity is the last day of the month of February, in which case the month of February shall not be considered to be lengthened to a 30-day month); or

(ii) when the 2006 ISDA Definitions are specified in the relevant Final Terms as being applicable:

(A) if "**Actual/Actual (ICMA)**" is so specified, means:

(1) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods normally ending in any year; and

(2) where the Calculation Period is longer than one Regular Period, the sum of:

i. the actual number of days in such Calculation Period falling in the Regular Period in which it begins divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and

ii. the actual number of days in such Calculation Period falling in the next Regular Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods normally ending in any year;

(B) if "**Actual/Actual**" or "**Actual/Actual (ISDA)**" is so specified, means the actual number of days in the Calculation Period divided by 365 (or, if any portion of the Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by

366 and (B) the actual number of days in that portion of the Calculation Period falling in a non-leap year divided by 365);

(C) if "**Actual/365 (Fixed)**" is so specified, means the actual number of days in the Calculation Period divided by 365;

(D) if "**Actual/360**" is so specified, means the actual number of days in the Calculation Period divided by 360;

(E) if "**30/360**" is so specified, means the number of days in the Calculation Period divided by 360 calculated on a formula basis as follows:

$$\text{Day Count Faction} = \frac{[360\ x\ (Y_2 - Y_1)] + [30\ x\ (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"**Y_1**" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"**Y_2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**M_1**" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"**M_2**" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**D_1**" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D_1 will be 30; and

"**D_2**" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and D_1 is greater than 29, in which case D_2 will be 30;

(F) if "**30E/360**" or "**Eurobond Basis**" is so specified, means the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Faction} = \frac{[360\ x\ (Y_2 - Y_1)] + [30\ x\ (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"**Y_1**" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"**Y_2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**M_1**" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"**M_2**" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**D_1**" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D_1 will be

30; and

"D_2" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31, in which case D_2 will be 30;

(G) if **"30E/360 (ISDA)"** is so specified, means the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Faction} = \frac{[360\ x\ (Y_2 - Y_1)] + [30\ x\ (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"Y_1" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"Y_2" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"M_1" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"M_2" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"D_1" is the first calendar day, expressed as a number, of the Calculation Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D_1 will be 30; and

"D_2" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case D_2 will be 30;

provided, however, that in each such case the number of days in the Calculation Period is calculated from and including the first day of the Calculation Period to but excluding the last day of the Calculation Period;

"**Default**" means,

(i) an Event of Default; or

(ii) an event or circumstance which would be (with the expiry of a grace period, the giving of notice or the making of any relevant determination) an Event of Default;

"**Early Redemption Amount (Tax)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

"**Early Termination Amount**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, these Conditions or the relevant Final Terms;

"**Euroclear**" means Euroclear Bank SA/NV;

"**Extraordinary Resolution**" has the meaning given in the Trust Deed;

"**Final Redemption Amount**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

"**Financial Indebtedness**" means with respect to any person, at any time, without duplication:

(i) its liabilities for borrowed money and its redemption obligations in respect of any mandatorily redeemable class of shares (or similar equity interests) of such person that is preferred over any other class of shares (or similar equity interests) of such person as to the payment of dividends or payment of any amount upon liquidation or dissolution of such person;

(ii) its liabilities for the deferred purchase price of property acquired by such person (excluding accounts payable arising in the ordinary course of business but including all liabilities created or arising under any conditional sale or other title retention agreement with respect to any such property);

(iii) all liabilities appearing on its balance sheet in accordance with GAAP in respect of capital leases and all liabilities which would appear on its balance sheet in accordance with GAAP in respect of synthetic leases assuming such synthetic leases were accounted for as capital leases (other than any liability in respect of a lease or hire purchase contract which would, in accordance with GAAP in force prior to 1 January 2019, have been treated as an operating lease);

(iv) all liabilities for borrowed money secured by any Security Interest with respect to any property owned by such person (whether or not it has assumed or otherwise become liable for such liabilities);

(v) all its liabilities in respect of letters of credit or instruments serving a similar function issued or accepted for its account by banks and other financial institutions (whether or not representing obligations for borrowed money);

(vi) the aggregate swap termination value of all swap contracts of such person; and

(vii) any Guarantee of such person with respect to liabilities of a type described in any of paragraphs (i) to (v) hereof.

Financial Indebtedness of any person shall include all obligations of such person of the character described in paragraphs (i) through (vi) to the extent such person remains legally liable in respect thereof notwithstanding that any such obligation is deemed to be extinguished under GAAP;

"**Fixed Coupon Amount**" has the meaning given in the relevant Final Terms;

"**GAAP**" means generally accepted accounting principles in the jurisdiction of the Parent from time to time (including, at the Parent's option, IFRS);

"**Group**" means the Parent and its Subsidiaries;

"**Group Member**" means a member of the Group;

"**Guarantee**" means, with respect to any person, any obligation (except the endorsement in the ordinary course of business of negotiable instruments for deposit or collection) of such person guaranteeing or in effect guaranteeing any indebtedness, dividend or other obligation of any other person in any manner, whether directly or indirectly, including (without limitation) obligations incurred through an agreement, contingent or otherwise, by such person:

(i) to purchase such indebtedness or obligation or any property constituting security therefor;

(ii) to advance or supply funds:

(A) for the purchase or payment of such indebtedness or obligation; or

(B) to maintain any working capital or other balance sheet condition or any income statement condition of any other person or otherwise to advance or make available funds for the purchase or payment of such indebtedness or obligation;

(iii) to lease properties or to purchase properties or services primarily for the purpose of assuring the owner of such indebtedness or obligation of the ability of any other person to make payment of the indebtedness or obligation; or

(iv) otherwise to assure the owner of such indebtedness or obligation against loss in respect thereof.

In any computation of the indebtedness or other liabilities of the obligor under any Guarantee, the indebtedness or other obligations that are the subject of such Guarantee shall be assumed to be direct obligations of such obligor;

"**Guarantee of the Notes**" means the guarantee of the Notes given by the Guarantors in the Trust Deed;

"**Holding Company**" of any person, means a company in respect of which that other person is a Subsidiary;

"**IFRS**" means international accounting standards within the meaning of Commission Regulation (EC) 1606/2002 (as amended from time to time) to the extent applicable to the relevant financial statements;

"**Insignificant Subsidiary**" means, at any time, a Subsidiary of the Parent, of which either (or both):

(i) the net worth is less than two per cent. of Consolidated Net Worth at that time; or

(ii) the net income for the Measurement Period then most recently ended is less than three per cent. of Consolidated Net Earnings for that Measurement Period,

and, in either case, whose Financial Indebtedness in excess of the greater of US$50,000,000 and three per cent. of Consolidated Net Worth at that time is not guaranteed or supported in a similar manner by any other Group Member, unless that Group Member is also an Insignificant Subsidiary.

For the purposes of this definition, net worth for a Subsidiary will be calculated on the same basis as Consolidated Net Worth (but in this case calculated for an individual Subsidiary), with figures being taken from its latest available financial statements (whether year end or semi-annual, and whether audited or otherwise);

"**Interest Amount**" means, in relation to a Note and an Interest Period, the amount of interest payable in respect of that Note for that Interest Period;

"**Interest Commencement Date**" means the Issue Date of the Notes or such other date as may be specified as the Interest Commencement Date in the relevant Final Terms;

"**Interest Determination Date**" has the meaning given in the relevant Final Terms;

"**Interest Payment Date**" means the First Interest Payment Date and any date or dates specified as such in, or determined in accordance with the provisions of, the relevant Final Terms and, if a Business Day Convention is specified in the relevant Final Terms:

(i) as the same may be adjusted in accordance with the relevant Business Day Convention; or

(ii) if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention and an interval of a number of calendar months is specified in the relevant Final Terms as being the Specified Period, each of such dates as may occur in accordance with the FRN Convention, Floating Rate Convention or Eurodollar Convention at such Specified Period of calendar months following the Interest Commencement Date (in the case of the first Interest Payment Date) or the previous Interest Payment Date (in any other case);

"**Interest Period**" means each period beginning on (and including) the Interest Commencement Date or any Interest Payment Date and ending on (but excluding) the next Interest Payment Date;

"**Investment**" means any investment, made in cash or by delivery of property, by the Parent or any of its Subsidiaries:

(i) in any person, whether by acquisition of stock, Financial Indebtedness or other obligation or security, or by loan, Guarantee, advance, capital contribution or otherwise; or

(ii) in any property;

"**ISDA Definitions**" means the 2006 ISDA Definitions as further amended and updated as at the Issue Date of the first Tranche of the Notes of the relevant Series (as specified in the relevant Final Terms) as published by the International Swaps and Derivatives Association, Inc. or if so specified in the relevant Final Terms, the 2000 ISDA Definitions as further amended and updated as at the Issue Date of the first Tranche of the Notes of the relevant Series (as specified in the relevant Final Terms) as published by the International Swaps and Derivatives Association, Inc.;

"**Islamic Financing Transaction**" means a sukuk (or Islamic bond) or similar Islamic debt capital markets instrument which complies with Shari'a where:

(i) an asset of the Parent or any of its Subsidiaries is transferred or otherwise disposed of to a special purpose company;

(ii) the Parent or a Subsidiary has an obligation to (and will) re-acquire that asset upon maturity of the relevant debt capital market instrument; and

(iii) the beneficiaries of the special purpose company:

(A) have no entitlement or rights to the asset, by way of a Security Interest or otherwise; and

(B) have no right to prevent the re-transfer of the asset back to the Parent or Subsidiary;

"**Issue Date**" has the meaning given in the relevant Final Terms;

"**Limited Group Member**" means a member of the Group other than an Insignificant Subsidiary;

"**Limited Recourse Trade Finance Indebtedness**" means Financial Indebtedness:

(i) incurred by the Parent or any Subsidiary in respect of a commercial transaction pursuant to which the risk of non-performance by a party to such commercial transaction (the "**Third Party**") other than the Parent or such Subsidiary (as the borrower of such Financial Indebtedness) or the lender financing such Financial Indebtedness, is apportioned (the amount of such Financial Indebtedness apportioned to the Parent or any Subsidiary herein, the "**Apportioned Amount**") between the Parent or such Subsidiary (as the borrower of such Financial Indebtedness) and the lender; and

(ii) in respect of which, upon the non-performance of the Third Party of its contractual obligations in respect of such commercial transaction, the Parent or such Subsidiary (as the borrower of such Financial Indebtedness), as the case may be, is liable to the lender solely for the monetary value of its Apportioned Amount;

"**Margin**" has the meaning given in the relevant Final Terms;

"**Material**" means material in relation to the business, operations, affairs, financial condition, assets, properties or prospects of the Group taken as a whole;

"**Maturity Date**" has the meaning given in the relevant Final Terms;

"**Maximum Redemption Amount**" has the meaning given in the relevant Final Terms;

"**Measurement Period**" means a period of 12 months ending on the last day of a financial half-year of Parent;

"**Meeting**" has the meaning given to it in the Trust Deed;

"**Member State**" means a Member State of the European Economic Area;

"**Minimum Redemption Amount**" has the meaning given in the relevant Final Terms;

"**Non-Recourse Group Member**" means any member of the Group other than (i) any Project Company or (ii) any Holding Company of a Project Company incorporated solely for the purpose of, and whose sole or principal activity consists of, the incurrence of Financial Indebtedness and making that Financial Indebtedness available to that Project Company;

"**Nyrstar Debt Restructuring**" means the restructuring of the indebtedness of Nyrstar N.V. and its consolidated subsidiaries implemented pursuant to a scheme or schemes of arrangement under section 899 of the Companies Act of NN2 Newco Limited.

"**Optional Redemption Amount (Call)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

"**Optional Redemption Amount (Put)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Final Terms;

"**Optional Redemption Date (Call)**" has the meaning given in the relevant Final Terms;

"**Optional Redemption Date (Put)**" has the meaning given in the relevant Final Terms;

"**Parent**" means Trafigura Group Pte. Ltd. or any entity which is substituted for Trafigura Group Pte. Ltd. (or for any previously Substituted Guarantor for Trafigura Group Pte. Ltd. in accordance with Condition 16(c) (*Substitution*);

"**Payment Business Day**" means:

(i) if the currency of payment is euro, any day which is:

(A) a day on which banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and

(B) in the case of payment by transfer to an account, a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or

(ii) if the currency of payment is not euro, any day which is:

(A) a day on which banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and

(B) in the case of payment by transfer to an account, a day on which dealings in foreign currencies may be carried on in London, in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre;

"**Permitted Indebtedness**" means any Financial Indebtedness:

(i) incurred to finance, hedge or execute commodity transactions (including, without limitation, working capital facilities, recourse discounting of receivables, prepayment or

similar transactions, take or pay transactions, storage financing, sale and repurchase transactions and commodity inventory and trade receivable borrowing base financing) entered into in the ordinary course of the Parent's or one of its Subsidiary's business, consistent with past practices;

(ii) which is non-recourse or limited recourse trade finance Financial Indebtedness incurred in connection with structured transactions entered into in the ordinary course of the Parent's or one of its Subsidiary's trading business;

(iii) owed by the Parent to any Wholly-Owned Subsidiary or by any Subsidiary of the Parent to the Parent or any Wholly-Owned Subsidiary;

(iv) which is Project Finance Indebtedness incurred in connection with the purchase or refinancing of an Investment, **provided that** the Financial Indebtedness under this paragraph (iv) does not exceed 100 per cent. of the aggregate consideration payable to acquire such Investment;

(v) which is existing at, or entered into upon, the issue date of a Note, incurred or entered into, or incurred or drawn under any facility put in place, in connection with as part of the Nyrstar Debt Restructuring (and any extensions, or renewals, replacements or refinancings (on one of more occasions, including, for the avoidance of doubt, any subsequent refinancing of any such refinancing, and so on) of any such Financial Indebtedness or of such a facility; or

(vi) owed by a Subsidiary and which existed and was outstanding at the time such Subsidiary became a member of the Group and any extensions or renewals thereof;

"**Permitted Securitisation**" means the sale of inventory, receivables or other assets of the Group pursuant to which:

(i) a member of the Group disposes of such inventory, receivables or other assets in a true sale on a non-recourse basis to SPE; and

(ii) SPE incurs Financial Indebtedness to finance its acquisition of such inventory, receivables or assets;

"**Permitted Security Interest**" means:

(i) any Security Interest listed in a Schedule of a Principal Banking Facility setting forth existing Security and Indebtedness of the Group as such Schedule may be updated from time to time by reference to any equivalent Schedule contained in any subsequent agreement recording any Principal Banking Facility entered into after the date of the Trust Deed provided that the Company has delivered to the Trustee a signed copy of such agreement, except to the extent the principal amount secured by that Security Interest exceeds the amount stated in the then applicable Schedule;

(ii) Security Interests over any property for taxes or assessments or other governmental charges or levies, either not yet due or payable to the extent that non-payment thereof is permitted;

(iii) any liens arising by operation of law and in the ordinary course of business, and any rights of set-off arising by operation of law and in the ordinary course of business in each case, which have not been foreclosed or otherwise enforced against the assets to which they apply;

(iv) Security Interests created by or resulting from any litigation or legal proceedings which are being contested in good faith by appropriate proceedings and with respect to which the relevant member of the Group has established adequate reserves on its books in accordance with applicable accounting principles;

(v) Security Interests incidental to the normal conduct of business of any member of the Group or the ownership of its property, which are not incurred in connection with the

incurrence of Financial Indebtedness and which do not (taken as a whole) materially impair the use of such property in the operation of the business of the Group taken as a whole or the value of such property for the purposes of such business;

(vi) Security Interests on property or assets of the Parent or any of its Subsidiaries securing Financial Indebtedness owing to the Parent or a Wholly-Owned Subsidiary;

(vii) Security Interests to secure Permitted Indebtedness (other than Permitted Indebtedness pursuant to paragraph (v) of the definition of that term), **provided that** the aggregate fair market value of the assets that are subject to any such Security Interest does not exceed:

(A) other than in the case of Short-Term Trade Finance and Project Finance Indebtedness and Permitted Indebtedness incurred or entered into, or incurred or drawn under any facility put in place, in connection with as part of the Nyrstar Debt Restructuring, 120 per cent. of the amount of such Permitted Indebtedness incurred by the relevant Subsidiary of the Parent and secured by such assets; or

(B) in the case of Project Finance Indebtedness, 200 per cent. of the amount of such Project Finance Indebtedness incurred by the relevant Subsidiary of the Parent and secured by such assets;

(viii) Security Interests granted by SPE over its assets to secure its Financial Indebtedness arising under a Permitted Securitisation;

(ix) the extension, renewal or replacement of any Security Interest permitted by subparagraph (i) above over the same property, **provided that** no Default would occur as a result;

(x) any Security Interest:

(A) over an asset or any proceeds or revenue derived from that asset to secure any Financial Indebtedness entered into in connection with the provision of all or a part of the purchase price or cost of the construction of such asset, **provided that** the Security Interest is created contemporaneously with, or within 120 days (or such longer period as it may take to perfect the Security Interest in the jurisdiction where such asset is located) after, such acquisition or the completion of such construction; or

(B) over an asset existing at the time of the acquisition of that asset by a member of the Group, whether or not the Financial Indebtedness secured thereby is assumed by that member of the Group; or

(C) existing over an asset of a company at the time such company is merged into or consolidated with a member of the Group, or at the time of a sale, lease or other disposal of the assets of a company or firm as a whole or substantially as a whole to a member of the Group,

provided in each case that the aggregate principal amount of the Financial Indebtedness secured by any such Security Interest does not exceed 100 per cent. of the fair market value of the relevant asset;

(xi) any asset transfer undertaken for the purpose of an Islamic Financing Transaction by the Parent or any of its Subsidiaries;

(xii) any Security Interest over any property required by and as a result granted in favour of governmental authorities in any relevant jurisdiction;

(xiii) any Security Interest to secure Financial Indebtedness of joint ventures in which a member of the Group has an interest, to the extent such Security Interest is on property or assets of or equity interests in such joint ventures;

(xiv) Security Interests over any property securing judgments (including judgment liens) not giving rise to an Event of Default, so long as any such Security Interest is adequately bonded and any appropriate legal proceedings which may have been duly initiated for the review of such judgment have not been finally terminated, or the period within which such proceedings may be initiated has not expired;

(xv) any liens, charges or rights of set-off arising in the ordinary course of business and required by any exchange or settlement system used by a member of the Group in connection with its cash management arrangements and limited to the cash provided by the member of the Group to effect the relevant exchange or settlement;

(xvi) any Security Interest comprising a netting or set-off arrangement entered into by a member of the Group in the ordinary course of its banking arrangements for the purpose of netting debit and credit balances;

(xvii) any Security Interest over any property created pursuant to any order of attachment, distraint, garnishee order or injunction restraining disposal of assets or similar legal process arising in connection with court proceedings not giving rise to an Event of Default;

(xviii) any bonds constituting Security Interests over cash deposits or marketable investment securities to procure the release from judicial arrest of an asset belonging to a member of the Group and not giving rise to an Event of Default;

(xix) any Security Interest over any goods to secure liabilities incurred on concessional terms in connection with the supply of those goods, being terms provided by any governmental or other similar export credit agency or official export-import bank or official export-import credit insurer;

(xx) any Security Interest created in respect of borrowings from any governmental or other similar export credit agency or official export import bank or official export-import credit insurer incurred on concessional terms by any member of the Group made to refinance any amount receivable under any export sales contract where the Security Interest consists only of a pledge or similar Security Interest granted by the member of the Group's claims under the contract against the foreign buyer and of any Security Interests or guarantee of those claims;

(xxi) any Security Interest created in connection with any arrangement entered into between a member of the Group with any person providing for the leasing by any member of the Group of any property which property has been or is to be sold or transferred by a member of the Group to such person, where such arrangement involves (i) a lease for a term, including renewal rights, of not more than 36 months, (ii) a lease of property within 18 months from the acquisition or, in the case of the construction, alteration or improvement of property, the later of the completion of the construction, alteration or improvement of such property or the commencement of commercial operation of the property, or (iii) leases between or among the Parent and any of its Subsidiaries);

(xxii) any liens, charges or rights of set-off arising in the ordinary course of business and required by any exchange or settlement system used by a member of the Group in connection with its cash management arrangements and limited to the cash provided by the member of the Group to effect the relevant exchange or settlement; and

(xxiii) any Security Interest securing Financial Indebtedness, **provided that** the aggregate outstanding amount of Financial Indebtedness secured by Security Interests under this paragraph (xxiii) does not exceed 25 per cent. of Consolidated Net Worth, determined as of the last day of the most recently ended Measurement Period of the Parent;

"**Permitted Transaction**" means:

(i) an intra-Group re-organisation of a Subsidiary of the Parent on a solvent basis **provided however that** any such re-organisation does not, subject to the provisions of Condition

16(c) (*Substitution*), extinguish, or result in a Guarantor being unable to perform or comply with, its obligations under the Guarantee; or

(ii) any other transaction approved by an Extraordinary Resolution of the Noteholders;

"**Person**" means any individual, company, corporation, firm, partnership, joint venture, association, organisation, state or agency of a state or other entity, whether or not having separate legal personality;

"**Principal Banking Facility**" means any senior unsecured funding facility provided to the Parent or any Guarantor of a size greater than USD 500,000,000;

"**Principal Financial Centre**" means, in relation to any currency, the principal financial centre for that currency **provided**, **however**, **that**:

(i) in relation to euro, it means the principal financial centre of such member state of the European Union as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Issuer; and

(ii) in relation to Australian dollars, it means Sydney and, in relation to New Zealand dollars, it means either Wellington or Auckland, as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Issuer;

"**Project Company**" means a Subsidiary of the Parent that is incorporated with limited liability and whose sole or principal activity consists in the acquisition, development, operation and/or maintenance of an asset or project;

"**Project Finance Indebtedness**" means Financial Indebtedness incurred in order to finance the acquisition, development, operation and/or maintenance of an asset or project, the creditors of which have no recourse to any Non-Recourse Group Member other than:

(i) an amount which does not exceed all or part of the revenues generated by the operation of the relevant asset or project;

(ii) amounts incurred in respect of the enforcement of security over the asset, assets of the project or all or part of the revenues generated by the operation of the relevant asset or project;

(iii) amounts equal to damages (including liquidated damages) incurred in connection with the breach of a contractual undertaking (other than the undertaking to pay a sum of money not being an amount corresponding to the revenues referred to in paragraph (a) above); or

(iv) under any guarantee by any Non-Recourse Group Member:

(A) of Financial Indebtedness of a Project Company or a Holding Company of a Project Company incorporated solely for the purpose of, and whose sole or principal activity consists of, the incurrence of Financial Indebtedness and making that Financial Indebtedness available to that Project Company; and

(B) under which third party lenders or other creditors of the Project Company (x) prior to completion of the relevant project, have recourse against Non-Recourse Group Member, provided the aggregate exposure of all Non-Recourse Group Members in respect of all guarantees under this sub-clause (x) outstanding at any one time shall not exceed 15 per cent. of Consolidated Net Worth and (y) following completion of the relevant project have no recourse against any Non-Recourse Group Member in its capacity as guarantor other than:

(1) security granted over the share capital, dividends and other rights relating to such share capital of, or any claim against the Project Company or a Holding Company of the Project Company;

(2) undertakings to subscribe for equity, quasi-equity investments or make subordinated debt contributions for the benefit of the Project Company or the Holding Company of the Project Company; and/or

(3) any guarantee the exercise of which relates solely to the operational condition of the asset or project or the operation or maintenance of such asset or project of the Project Company or the Holding Company of the Project Company;

"**Prospectus Regulation**" means Regulation (EU) 2017/1129 (as amended or superseded);

"**Put Option Notice**" means a notice which must be delivered to a Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder;

"**Put Option Receipt**" means a receipt issued by a Paying Agent to a depositing Noteholder upon deposit of a Note with such Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder;

"**Rate of Interest**" means the rate or rates (expressed as a percentage per annum) of interest payable in respect of the Notes specified in the relevant Final Terms or calculated or determined in accordance with the provisions of these Conditions and/or the relevant Final Terms;

"**Redemption Amount**" means, as appropriate, the Final Redemption Amount, the Early Redemption Amount (Tax), the Optional Redemption Amount (Call), the Optional Redemption Amount (Put), the Early Termination Amount or such other amount in the nature of a redemption amount as may be specified in, or determined in accordance with the provisions of, the relevant Final Terms;

"**Reference Banks**" has the meaning given in the relevant Final Terms or, if none, four major banks selected by the Issuer or an agent appointed at the time in the market that is most closely connected with the Reference Rate;

"**Reference Price**" has the meaning given in the relevant Final Terms;

"**Reference Rate**" means EURIBOR or LIBOR as specified in the relevant Final Terms in respect of the currency and period specified in the relevant Final Terms;

"**Regular Period**" means:

(i) in the case of Notes where interest is scheduled to be paid only by means of regular payments, each period from and including the Interest Commencement Date to but excluding the first Interest Payment Date and each successive period from and including one Interest Payment Date to but excluding the next Interest Payment Date;

(ii) in the case of Notes where, apart from the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date falls; and

(iii) in the case of Notes where, apart from one Interest Period other than the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date falls other than the Interest Payment Date falling at the end of the irregular Interest Period;

"**Relevant Date**" means, in relation to any payment, whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received in the Principal Financial Centre of the currency of payment by the Paying Agent on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Noteholders;

"**Relevant Financial Centre**" has the meaning given in the relevant Final Terms;

"**Relevant Screen Page**" means the page, section or other part of a particular information service (including, without limitation, Reuters) specified as the Relevant Screen Page in the relevant Final Terms, or such other page, section or other part as may replace it on that information service or such other information service, in each case, as may be nominated by the Person providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to the Reference Rate;

"**Relevant Time**" has the meaning given in the relevant Final Terms;

"**Reserved Matter**" means any proposal:

(i) to change any date fixed for payment of principal or interest in respect of the Notes, to reduce the amount of principal or interest payable on any date in respect of the Notes or to alter the method of calculating the amount of any payment in respect of the Notes on redemption or maturity or the date for any such payment;

(ii) to effect the exchange or substitution of the Notes for, or the conversion of the Notes into, shares, bonds or other obligations or securities of the Issuer, any Guarantor or any other person or body corporate formed or to be formed (other than as permitted under Clause 8.3 of the Trust Deed);

(iii) to change the currency in which amounts due in respect of the Notes are payable;

(iv) to modify any provision of the guarantee of the Notes (other than as permitted under Clause 8.3 of the Trust Deed);

(v) to change the quorum required at any Meeting or the majority required to pass an Extraordinary Resolution; or

(vi) to amend this definition;

"**Security Interest**" means any mortgage, pledge, lien, charge, assignment, hypothecation or security interest or any other agreement or arrangement having a similar effect;

"**Short-Term Trade Finance**" means Financial Indebtedness of a member of the Group having a maturity of 365 days or less and which is related to the purchase or sale (and any associated costs, including costs of any hedging arrangements) of commodities and in respect of which the borrower of such Financial Indebtedness has granted a Security Interest over such commodities or the receivables related thereto;

"**SPE**" means (a) Trafigura Securitisation Finance plc, an Irish public limited company, (b) Trafigura Commodities Funding Pte. Ltd., a Singapore private limited company, (c) Trafigura Global Commodities Funding Pte. Ltd., a Singapore private limited company, (d) Argonaut Receivables Company S.A., a Luxembourg public limited company, which, in each case, is neither a Subsidiary of the Parent nor under the control of the Parent, but which is consolidated in the financial statements of the Parent in accordance with GAAP, or (e) any similar vehicle which may or may not be a Subsidiary of the Parent or under its control or consolidated in its financial statements, in each case, established for the purposes of securitising receivables or inventory generated by the Parent or its Subsidiaries;

"**Specified Currency**" has the meaning given in the relevant Final Terms;

"**Specified Denomination(s)**" has the meaning given in the relevant Final Terms;

"**Specified Office**" has the meaning given in the Paying Agency Agreement or, in relation to the Trustee, has the meaning given to it in the Trust Deed;

"**Specified Period**" has the meaning given in the relevant Final Terms;

"**Subsidiary**" means as to any person, any other person in which such first person or one or more of its Subsidiaries owns more than 50 per cent. beneficial interest in the equity of such person and any partnership or joint venture if more than a 50 per cent. interest in the profits or capital thereof is owned by such first person or one or more of its Subsidiaries (unless such partnership or joint venture can and does ordinarily take major business actions without the prior approval of such person or one or more of its Subsidiaries). Unless the context otherwise requires, any reference to a "Subsidiary" is reference to a Subsidiary of the Parent;

"**Talon**" means a talon for further Coupons;

"**TARGET2**" means the Trans-European Automated Real-time Gross Settlement Express Transfer system which utilises a single shared platform and which was launched on November 19, 2007;

"**TARGET Settlement Day**" means any day on which the TARGET2 system is open for settlement of payments in euro;

"**Treaty**" means the Treaty establishing the European Communities, as subsequently amended;

"**Wholly-Owned Subsidiary**" means, at any time, any Subsidiary of which 90 per cent. or more of all of the equity interests (except directors' qualifying shares) and voting interests are owned, directly or indirectly, by the Parent; and

"**Zero Coupon Note**" means a Note specified as such in the relevant Final Terms.

(b) ***Interpretation***: In these Conditions:

(i) if the Notes are Zero Coupon Notes, references to Coupons and Couponholders are not applicable;

(ii) if Talons are specified in the relevant Final Terms as being attached to the Notes at the time of issue, references to Coupons shall be deemed to include references to Talons;

(iii) if Talons are not specified in the relevant Final Terms as being attached to the Notes at the time of issue, references to Talons are not applicable;

(iv) any reference to principal shall be deemed to include the Redemption Amount, any additional amounts in respect of principal which may be payable under Condition 11 (*Taxation*), any premium payable in respect of a Note and any other amount in the nature of principal payable pursuant to these Conditions or the Guarantee of the Notes;

(v) any reference to interest shall be deemed to include any additional amounts in respect of interest which may be payable under Condition 11 (*Taxation*) and any other amount in the nature of interest payable pursuant to these Conditions or the Guarantee of the Notes;

(vi) references to Notes being "**outstanding**" shall be construed in accordance with the Trust Deed;

(vii) if an expression is stated in Condition 2(a) to have the meaning given in the relevant Final Terms, but the relevant Final Terms gives no such meaning or specifies that such expression is "**not applicable**" then such expression is not applicable to the Notes; and

(viii) any reference to the Paying Agency Agreement or the Trust Deed shall be construed as a reference to the Paying Agency Agreement or the Trust Deed, as the case may be, as amended and/or supplemented up to and including the Issue Date of the Notes.

3. Form, Denomination and Title

The Notes are in bearer form in the Specified Denomination(s) with Coupons and, if specified in the relevant Final Terms, Talons attached at the time of issue, **provided that** in the case of any Notes which are to be admitted to trading on a regulated market within the European Economic Area or offered to the public in a Member State in circumstances which require the publication of a prospectus under the

Prospectus Regulation, the minimum Specified Denomination shall be EUR 100,000 (or its equivalent in any other currency as at the Issue Date of the relevant Notes). In the case of a Series of Notes with more than one Specified Denomination, Notes of one Specified Denomination will not be exchangeable for Notes of another Specified Denomination. Title to the Notes and the Coupons will pass by delivery. The holder of any Note or Coupon shall (except as otherwise required by law) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing thereon or any notice of any previous loss or theft thereof) and no Person shall be liable for so treating such holder.

4. **Status and Guarantees**

(a) ***Status of the Notes***: The Notes constitute direct, general and unconditional obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

(b) ***Guarantees of the Notes***: The Guarantors have in the Trust Deed unconditionally and irrevocably guaranteed, on a joint and several basis, the due and punctual payment of all sums from time to time payable by the Issuer in respect of the Notes and the Trust Deed. The Guarantee of the Notes and amounts payable under the Trust Deed constitutes direct, general and unconditional obligations of each Guarantor which will at all times rank at least *pari passu* with all other present and future unsecured and unsubordinated obligations of such Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

5. **Negative Pledge**

So long as any Note remains outstanding (as defined in the Trust Deed), neither the Issuer nor the Guarantors shall, and the Issuer and Guarantors shall procure that no member of the Group (other than any Insignificant Subsidiary) will, create or allow to exist any Security Interest (other than a Permitted Security Interest) on any of its assets or undertaking without (a) at the same time or prior thereto securing the Notes equally and rateably therewith to the satisfaction of the Trustee or (b) providing such other security or other beneficial arrangement for the Notes as the Trustee may in its absolute discretion deem not to be materially less beneficial to the interests of the Noteholders or as may be approved by an Extraordinary Resolution of Noteholders.

6. **Fixed Rate Note Provisions**

(a) ***Application***: This Condition 6 (*Fixed Rate Note Provisions*) is applicable to the Notes only if the Fixed Rate Note Provisions are specified in the relevant Final Terms as being applicable.

(b) ***Accrual of interest***: The Notes bear interest from, and including, the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 10 (*Payments*). Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition 6 (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent or, as the case may be, the Trustee has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) ***Fixed Coupon Amount***: The amount of interest payable in respect of each Note for any Interest Period shall be the relevant Fixed Coupon Amount and, if the Notes are in more than one Specified Denomination, shall be the relevant Fixed Coupon Amount in respect of the relevant Specified Denomination.

(d) ***Calculation of Interest Amount***: The amount of interest payable per Calculation Amount in respect of each Note for any period for which a Fixed Coupon Amount (or formula for its

calculation) is not specified shall be equal to the product of the Rate of Interest, the Calculation Amount and the relevant Day Count Fraction and rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards). For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

(e) ***Net Interest Amount***: Subject to the terms at Condition 11 (*Taxation*) if any withholding or deduction for or on account of tax is required by law and is imposed by the jurisdiction of the Issuer or, as the case may be, any Guarantor on any payment of principal or interest in respect of the Notes, the Issuer or, as the case may be, the relevant Guarantor shall pay such additional amount as will result in receipt by the Noteholders and Couponholders of such amount as would have been received by them if no such withholding or deduction had been required.

7. **Floating Rate Note Provisions**

(a) ***Application***: This Condition 7 (*Floating Rate Note Provisions*) is applicable to the Notes only if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable.

(b) ***Accrual of interest***: The Notes bear interest from, and including, the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 10 (*Payments*). Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent or, as the case may be, the Trustee has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) ***Screen Rate Determination***:

(i) If Screen Rate Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will, subject as provided below, be:

(A) the offered quotation; or

(B) the arithmetic mean of the offered quotations,

(expressed as a percentage rate per annum) for the Reference Rate which appears or appear, as the case may be, on the Relevant Screen Page as at either 11.00 a.m. (London time in the case of the London inter-bank offered rate ("**LIBOR**") or Brussels time in the case of the euro-zone inter-bank offered rate ("**EURIBOR**")) on the Interest Determination Date in question as determined by the Calculation Agent plus or minus (as indicated in the applicable Final Terms) the Margin (if any). If five or more of such offered quotations are available on the Relevant Screen Page, the highest (or, if there is more than one such highest quotation, one only of such quotations) and the lowest (or, if there is more than one such lowest quotation, one only of such quotations) shall be disregarded by the Calculation Agent for the purpose of determining the arithmetic mean of such offered quotations.

If the Reference Rate from time to time in respect of Floating Rate Notes is specified in the applicable Final Terms as being other than LIBOR or EURIBOR, the Rate of Interest in respect of such Notes will be determined as provided in the applicable Final Terms.

(ii) If Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Final Terms, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date, where:

(A) one rate shall be determined as if the relevant Interest Period were the period of time for which rates are available next shorter than the length of the relevant Interest Period; and

(B) the other rate shall be determined as if the relevant Interest Period were the period of time for which rates are available next longer than the length of the relevant Interest Period; **provided, however, that** if no rate is available for a period of time next shorter or, as the case may be, next longer than the length of the relevant Interest Period, then the Calculation Agent shall determine such rate at such time and by reference to such sources as the Issuer determines appropriate and notifies to it.

(iii) If the Relevant Screen Page is not available or if sub-paragraph (i)(A) applies and no such offered quotation appears on the Relevant Screen Page or if sub-paragraph (i)(B) above applies and fewer than three such offered quotations appear on the Relevant Screen Page in each case as at the time specified above, subject as provided below, the Issuer (or an agent appointed to do so on its behalf) shall request, if the Reference Rate is LIBOR, the principal London office of each of the Reference Banks or, if the Reference Rate is EURIBOR, the principal Euro-zone office of each of the Reference Banks, to provide the Calculation Agent with its offered quotation (expressed as a percentage rate per annum) for the Reference Rate if the Reference Rate is LIBOR, at approximately 11.00 a.m. (London time), or if the Reference Rate is EURIBOR, at approximately 11.00 a.m. (Brussels time) on the Interest Determination Date in question. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean of such offered quotations as calculated by the Calculation Agent.

(iv) If paragraph (iii) above applies and fewer than two Reference Banks are providing offered quotations, subject as provided below, the Rate of Interest shall be the offered rate for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, or the arithmetic mean of the offered rates for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, at which, if the Reference Rate is LIBOR, at approximately 11.00 a.m. (London time) or, if the Reference Rate is EURIBOR, at approximately 11.00 a.m. (Brussels time), on the relevant Interest Determination Date, which any one or more banks (which bank or banks is or are in the opinion of the Trustee and the Issuer suitable for such purpose) informs the Calculation Agent it is quoting to leading banks in, if the Reference Rate is LIBOR, the London inter-bank market or, if the Reference Rate is EURIBOR, the Euro-zone inter-bank market, as the case may be, **provided that**, if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this paragraph, the Rate of Interest shall be determined as at the last preceding Interest Determination Date (though substituting, where a different Margin or Maximum or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum or Minimum Rate of Interest relating to that last preceding Interest Period).

(d) ***ISDA Determination***: If ISDA Determination is specified in the relevant Final Terms as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be the sum of the Margin and the relevant ISDA Rate where "**ISDA Rate**" in relation to any Interest Period means a rate equal to the Floating Rate (as defined in the ISDA Definitions) that would be determined by the Calculation Agent under an interest rate swap transaction if the Calculation Agent were acting as Calculation Agent for that interest rate swap transaction under the terms of an agreement incorporating the ISDA Definitions and under which:

(i) the Floating Rate Option (as defined in the ISDA Definitions) is as specified in the relevant Final Terms;

(ii) the Designated Maturity (as defined in the ISDA Definitions) is a period specified in the relevant Final Terms;

(iii) the relevant Reset Date (as defined in the ISDA Definitions) is either (A) if the relevant Floating Rate Option is based on LIBOR or on EURIBOR for a currency, the first day of that Interest Period or (B) in any other case, as specified in the relevant Final Terms; and

(iv) if Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Final Terms, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates based on the relevant Floating Rate Option, where:

(A) one rate shall be determined as if the Designated Maturity were the period of time for which rates are available next shorter than the length of the relevant Interest Period; and

(B) the other rate shall be determined as if the Designated Maturity were the period of time for which rates are available next longer than the length of the relevant Interest Period,

provided, however, that if there is no rate available for a period of time next shorter than the length of the relevant Interest Period or, as the case may be, next longer than the length of the relevant Interest Period, then the Calculation Agent shall determine such rate at such time and by reference to such sources as the Issuer determines appropriate and notifies to it.

(e) ***Maximum or Minimum Rate of Interest***: If any Maximum Rate of Interest or Minimum Rate of Interest is specified in the relevant Final Terms, then the Rate of Interest shall in no event be greater than the maximum or be less than the minimum so specified.

(f) ***Calculation of Interest Amount***: The Calculation Agent will, as soon as practicable after the time at which the Rate of Interest is to be determined in relation to each Interest Period, calculate the Interest Amount payable in respect of the Calculation Amount for such Interest Period. The Interest Amount will be equal to the product of the Rate of Interest for such Interest Period, the Calculation Amount and the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards). For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

(g) ***Publication***: The Calculation Agent will cause each Rate of Interest and Interest Amount determined by it, together with the relevant Interest Payment Date, Interest Period and any other amount(s) required to be determined by it together with any relevant payment date(s) to be notified to the Issuer, each Guarantor, the Trustee and the Paying Agents, Euronext Dublin and each stock exchange (if any) on which the Notes are then listed and /or admitted to trading as soon as practicable after such determination but (in the case of each Rate of Interest, Interest Amount and Interest Payment Date) in any event not later than the first day of the relevant Interest Period. Notice thereof shall also promptly be given to the Noteholders. The Calculation Agent will be entitled to recalculate any Interest Amount (on the basis of the foregoing provisions) without notice in the event of an extension or shortening of the relevant Interest Period. If the Calculation Amount is less than the minimum Specified Denomination the Calculation Agent shall not be obliged to publish each Interest Amount but instead may publish only the Calculation Amount and the Interest Amount in respect of a Note having the minimum Specified Denomination.

(h) ***Notifications etc***: All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition by the Calculation Agent will (in the absence of manifest error) be binding on the Issuer, the Guarantors, the Trustee, the Paying Agents, the Noteholders and the Couponholders and (subject as aforesaid) no liability to any such Person will attach to the Calculation Agent or the Trustee in connection with the exercise or non- exercise by it of its powers, duties and discretions for such purposes.

(i) ***Net Interest Amount***: If any withholding or deduction is imposed under Condition 11 (*Taxation*), the Issuer shall increase the payment of principal or interest to such amount as will result in receipt by the Noteholders and Couponholders of such amount as would have been received by them if no such withholding or deduction had been required (except as provided in Condition 11 (*Taxation*)).

(j) ***Calculation Agent***: Notwithstanding any other provision of this Condition 7, if in the Calculation Agent's opinion there is any uncertainty between two or more alternative courses of action in making any determination or calculation under this Condition 7, the Calculation Agent shall promptly notify the Issuer and the Independent Adviser thereof and the Issuer and the Independent Adviser shall direct the Calculation Agent in writing as to which alternative course of action to adopt. If the Calculation Agent is not promptly provided with such direction, or if otherwise unable to make such calculation or determination for any reason, it shall notify the Issuer and the Independent Adviser thereof and the Calculation Agent shall be under no obligation to make such calculation or determination and shall not incur any liability for not doing so.

7A **Benchmark Discontinuation**

This Condition 7A applies only if "*Benchmark Discontinuation*" is specified to be applicable in the applicable Final Terms or the applicable Drawdown Prospectus and where Screen Rate Determination is specified in the applicable Final Terms or the applicable Drawdown Prospectus as the manner in which the Rate of Interest is to be determined.

(a) If the Issuer has determined that a Benchmark Event has occurred in relation to an Original Reference Rate when any Rate of Interest (or any component part thereof) remains to be determined by reference to such Original Reference Rate, then the Issuer shall notify the Calculation Agent and shall use its reasonable endeavours to select and appoint and consult with an Independent Adviser, as soon as reasonably practicable, with a view to the Issuer determining a Successor Rate, failing which an Alternative Rate (in accordance with Condition 7A(b)(ii)) and, in either case, an Adjustment Spread, if any (in accordance with Condition 7A(c)) and/or any Benchmark Amendments (in accordance with Condition 7A(d)).

An Independent Adviser appointed pursuant to this Condition 7A shall act in good faith and (in the absence of fraud) shall have no liability whatsoever to the Issuer, the Trustee, the Paying Agents or the Noteholders for any determination made by it or for any advice given to the Issuer in connection with any determination made by the Issuer, pursuant to this Condition 7A.

(b) If the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines and notifies the Calculation Agent prior to the date which is five business days prior to the next Interest Determination Date that:

(i) there is a Successor Rate, then such Successor Rate shall (subject to adjustment as provided in Condition 7A(c)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part thereof) for all future payments of interest on the Instruments (subject to the operation of this Condition 7A); or

(ii) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate shall (subject to adjustment as provided in Condition 7A(c)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part thereof) for all future payments of interest on the Notes (subject to the operation of this Condition 7A).

(c) If the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines and notifies the Calculation Agent prior to the date which is five business days prior to the next Interest Determination Date (A) that an Adjustment Spread is required to be applied to the Successor Rate or the Alternative Rate (as the case may be) in order to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as applicable) to Noteholders or Couponholders as a result of the replacement of an Original Reference Rate and (B) the quantum

of, or a formula or methodology for determining, such Adjustment Spread, then such Adjustment Spread shall be applied to the Successor Rate or the Alternative Rate (as the case may be) for each subsequent determination of a relevant Rate of Interest (or a component part thereof) by reference to such Successor Rate or Alternative Rate (as applicable).

(d) If any Successor Rate, Alternative Rate or Adjustment Spread is determined in accordance with this Condition 7A and the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines (i) that amendments to these Conditions, the Trust Deed and/or the Agency Agreement are necessary to ensure the proper operation of such Successor Rate, Alternative Rate and/or Adjustment Spread (such amendments, the "**Benchmark Amendments**") and (ii) the terms of the Benchmark Amendments, then the Issuer shall, subject to giving notice thereof in accordance with Condition 7A(e), but without any requirement for the consent or approval of Noteholders, vary these Conditions and/or the Trust Deed and/or the Agency Agreement to give effect to such Benchmark Amendments with effect from the date specified in such notice (in accordance with Condition 7A(f) below). In connection with any such variation in accordance with this Condition 7A(d), the Issuer shall comply with the rules of any stock exchange on which the Instruments are for the time being listed or admitted to trading.

(e) If the Issuer is unable to appoint an Independent Adviser in accordance with this Condition 7A, the Issuer, acting in good faith and in a commercially reasonable manner, may still determine (i) a Successor Rate or Alternative Rate and (ii) in either case, an Adjustment Spread and/or any Benchmark Amendments in accordance with this Condition 7A (with the relevant provisions in this Condition 7A applying *mutatis mutandis* to allow such determinations to be made by the Issuer without consultation with an Independent Adviser).

Where this Condition 7A(e) applies, without prejudice to the definitions thereof, for the purposes of determining any Successor Rate, Alternative Rate, Adjustment Spread and/or Benchmark Amendments (as the case may be), the Issuer will take into account any relevant and applicable market precedents and customary market usage as well as any published guidance from relevant associations involved in the establishment of market standards and/or protocols in the international debt capital markets.

(f) Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments, determined under this Condition 7A will be notified promptly by the Issuer to the Trustee and, the Agents and, in accordance with Condition 20, the Noteholders. Such notice shall be irrevocable and shall specify the effective date, which shall not be less than five Business Days prior to the next Interest Determination Date of the Benchmark Amendments, if any.

No later than notifying the Trustee and the Agents of the same, the Issuer shall deliver to the Trustee and the Agent a certificate signed by two duly authorised signatories of the Issuer:

(A) confirming (i) that a Benchmark Event has occurred, (ii) the Successor Rate or, as the case may be, the Alternative Rate and, (iii) where applicable, any Adjustment Spread and/or the specific terms of any Benchmark Amendments, in each case as determined in accordance with the provisions of this Condition 7A; and

(B) certifying that the Benchmark Amendments (if applicable) (i) are necessary to ensure the proper operation of such Successor Rate, Alternative Rate and/or Adjustment Spread and (ii) in each case have been drafted solely to such effect.

The Trustee shall be entitled to rely on such certificate (without further enquiry and without liability to any person) as sufficient evidence thereof.

For the avoidance of doubt, the Trustee and the Agents shall, at the request and expense of the Issuer, without any consent or sanction of the Noteholders, concur with the Issuer in making any modification to these Conditions, the Agency Agreement or the Trust Deed with respect to the Successor Rate or Alternative Rate and the Adjustment Spread (if any) and/or the Benchmark Amendments (if any) (which, for the avoidance of doubt, shall not be treated as being within the scope of the Reserved Matters (as defined in the Trust Deed)) specified in such certificate, and

such modifications will (in the absence of manifest error) be binding on the Issuer, the Trustee, the Paying Agents and the Noteholders.

Notwithstanding any other provision of this Condition 7A, neither the Trustee nor the Agents shall be obliged to agree to any modifications, amendments and/or adjustments pursuant to this Condition 7A which, in the sole opinion of the Trustee and/or the Agents would have the effect of (i) exposing it to any liability against which it has not been indemnified and/or secured and/or prefunded to its satisfaction or (ii) increasing the obligations or duties, or decreasing the rights or protections, of it in the Trust Deed, the Agency Agreement and/or these Conditions. For the avoidance of doubt, none of the Trustee, the Paying Agents or the Calculation Agent will be responsible for determining whether or not a Benchmark Event has occurred.

(g) Without prejudice to the obligations of the Issuer under Condition 7A, the Original Reference Rate and the fallback provisions provided for in Condition 7(c) will continue to apply unless and until either a Successor Rate or an Alternative Rate (and any associated Adjustment Spread and/or Benchmark Amendments) is determined pursuant to this Condition 7A.

In such circumstances, the Issuer will be entitled (but not obliged), at any time thereafter, to elect to re-apply the provisions of Condition 7A*, mutatis mutandis*, on one or more occasions until a Successor Rate or Alternative Rate (and, if applicable, any associated Adjustment Spread and/or Benchmark Amendments) has been determined and notified (and, until such determination and notification (if any), the fallback provisions provided for in Condition 7(c) will continue to apply).

(h) As used in this Condition 7A:

"**Adjustment Spread**" means either (a) a spread (which may be positive, negative or zero) or (b) a formula or methodology for calculating a spread, in each case to be applied to the Successor Rate or the Alternative Rate (as the case may be) and is the spread, formula or methodology which:

(i) in the case of a Successor Rate, is formally recommended in relation to the replacement of the Original Reference Rate with the Successor Rate by any Relevant Nominating Body; or (if no such recommendation has been made, or in the case of an Alternative Rate),

(ii) the Issuer determines, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner is customarily applied to the relevant Successor Rate or the Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the Original Reference Rate; or (if the Issuer determines that no such spread is customarily applied),

(iii) the Issuer determines, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Original Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be).

"**Alternative Rate**" means an alternative benchmark or screen rate which the Issuer determines in accordance with Condition 7A(b)(ii) has replaced the Original Reference Rate in customary market usage in the international debt capital markets for the purposes of determining rates of interest (or the relevant component part thereof) for the same interest period and in the same Specified Currency as the Notes.

"**Benchmark Amendments**" has the meaning given to it in Condition 7A(d).

"**Benchmark Event**" means:

(i) the Original Reference Rate ceasing to be published for a period of at least five consecutive Business Days or ceasing to exist; or

(ii) a public statement by the administrator of the Original Reference Rate that it has ceased or that it will cease publishing the Original Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of the Original Reference Rate); or

(iii) a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate has been or will be permanently or indefinitely discontinued; or

(iv) a public statement by the supervisor of the administrator of the Original Reference Rate that means the Original Reference Rate will be prohibited from being used or that its use will be subject to restrictions or adverse consequences; or

(v) an official announcement by the supervisor of the administrator of the Original Reference Rate, with effect from a date after (i) 31 December 2021 with respect to LIBOR or (ii) such other applicable date with respect to any other relevant benchmark rate, that the Original Reference Rate is no longer representative of its relevant underlying market; or

(vi) it has become unlawful for the Trustee, any Paying Agent, the Calculation Agent, the Issuer or any other party to calculate any payments due to be made to any Noteholder using the Original Reference Rate,

In each case, as determined by the Issuer or, in the case of (vi) above, the relevant party and provided that in the case of sub-paragraphs (ii), (iii) and (iv), the Benchmark Event shall occur on the date of the cessation of publication of the Original Reference Rate, the discontinuation of the Original Reference Rate, or the prohibition of use of the Original Reference Rate, as the case may be, and not the date of the relevant public statement.

"**Independent Adviser**" means an independent financial institution of international repute or an independent financial adviser with appropriate expertise appointed by the Issuer under Condition 7A(a).

"**Original Reference Rate**" means: (i) the benchmark or screen rate (as applicable) originally specified for the purpose of determining the relevant Rate of Interest (or any relevant component part(s) thereof) on the Notes; or (ii) any Successor Rate or Alternative Rate which has been determined in relation to such benchmark or screen rate (as applicable) pursuant to the operation of Condition 7A.

"**Relevant Nominating Body**" means, in respect of an Original Reference Rate:

(i) the central bank for the currency to which such Original Reference Rate relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of such Original Reference Rate; or

(ii) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (a) the central bank for the currency to which such Original Reference Rate relates, (b) any central bank or other supervisory authority which is responsible for supervising the administrator of such Original Reference Rate, (c) a group of the aforementioned central banks or other supervisory authorities or (d) the Financial Stability Board or any part thereof.

"Successor Rate" means a successor to or replacement of the Original Reference Rate which is formally recommended by any Relevant Nominating Body.

8. **Zero Coupon Note Provisions**

(a) ***Application***: This Condition 8 is applicable to the Notes only if the Zero Coupon Note Provisions are specified in the relevant Final Terms as being applicable.

(b) ***Late payment on Zero Coupon Notes***: If the Redemption Amount payable in respect of any Zero Coupon Note is improperly withheld or refused, the Redemption Amount shall thereafter be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price on the basis of the relevant Day Count Fraction from (and including) the Issue Date to (but excluding) whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent or as the case may be the Trustee has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

9. **Redemption and Purchase**

(a) ***Scheduled redemption***: Unless previously redeemed, or purchased and cancelled, the Notes will be redeemed at their Final Redemption Amount on the Maturity Date, subject as provided in Condition 10 (*Payments*).

(b) ***Redemption for tax reasons***: The Notes may be redeemed at the option of the Issuer in whole, but not in part:

(i) at any time (if the Floating Rate Note Provisions are not specified in the relevant Final Terms as being applicable); or

(ii) on any Interest Payment Date (if the Floating Rate Note Provisions are specified in the relevant Final Terms as being applicable),

on giving not less than 30 nor more than 60 days' notice to the Noteholders (in accordance with Condition 20 (*Notices*)) and the Trustee (which notice shall be irrevocable), at their Early Redemption Amount (Tax), together with interest accrued (if any) to the date fixed for redemption, if immediately before giving such notice, the Issuer satisfies the Trustee that:

(A) (1) the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 11 (*Taxation*) as a result of any change in, or amendment to, the laws or regulations of its jurisdiction of incorporation or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the Issue Date of the first Tranche of the Notes and (2) such obligation cannot be avoided by the Issuer taking reasonable measures available to it; or

(B) (1) any Guarantor has or (if a demand were made under the Guarantee of the Notes) would become obliged to pay additional amounts as provided or referred to in Condition 11 (*Taxation*) or the Guarantee of the Notes, as the case may be, or any Guarantor has or will become obliged to make any such withholding or deduction as is referred to in Condition 11 (*Taxation*) or in the Guarantee of the Notes, as the case may be, from any amount paid by it to the Issuer in order to enable the Issuer to make a payment of principal or interest in respect of the Notes, in either case as a result of any change in, or amendment to, the laws or regulations of such Guarantor's jurisdiction of incorporation or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the Issue Date of the first Tranche of the Notes, and (2) such obligation cannot be avoided by such Guarantor taking reasonable measures available to it,

provided, **however**, **that** no such notice of redemption shall be given earlier than:

(i) where the Notes may be redeemed at any time, 90 days prior to the earliest date on which the Issuer or a Guarantor would be obliged to pay such additional amounts or the relevant Guarantor would be obliged to make such withholding or deduction if a payment in respect of the Notes were then due or (as the case may be) a demand under the Guarantees of the Notes were then made; or

(ii) where the Notes may be redeemed only on an Interest Payment Date, 60 days prior to the Interest Payment Date occurring immediately before the earliest date on which the Issuer or a Guarantor would be obliged to pay such additional amounts or the relevant Guarantor would be obliged to make such withholding or deduction if a payment in respect of the Notes were then due or (as the case may be) a demand under the Guarantee of the Notes were then made.

Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer shall deliver or procure that there is delivered to the Trustee (A) a certificate signed by an authorised signatory of the Issuer stating that the circumstances referred to in A(1) and A(2) prevail and setting out the details of such circumstances or (as the case may be) a certificate signed by an authorised signatory of the relevant Guarantor stating that the circumstances referred to in B(1) and B(2) prevail and setting out the details of such circumstances and (B) an opinion satisfactory to the Trustee of independent legal advisers of recognised standing to the effect that the Issuer or (as the case may be) the relevant Guarantor has or will become obliged to pay such additional amounts or (as the case may be) the Guarantor has or will become obliged to make such withholding or deduction as a result of such change or amendment. The Trustee shall be entitled to accept such certificate and opinion as sufficient evidence of the circumstances set out in A(1) and A(2) above or (as the case may be) B(1) and B(2) above, in which event they shall be conclusive and binding on the Noteholders. Upon the expiry of any such notice as is referred to in this Condition 9(b), the Issuer shall be bound to redeem the Notes in accordance with this Condition 9(b).

(c) ***Redemption at the option of the Issuer***: If the Call Option is specified in the relevant Final Terms as being applicable, the Notes may be redeemed at the option of the Issuer in whole or, if so specified in the relevant Final Terms, in part on any Optional Redemption Date (Call) at the relevant Optional Redemption Amount (Call) on the Issuer's giving not less than 30 nor more than 60 days' notice to the Noteholders (in accordance with Condition 20 (*Notices*)) and having notified the Trustee prior to the provision of such notice (which notice shall be irrevocable and shall oblige the Issuer to redeem the Notes or, as the case may be, the Notes specified in such notice on the relevant Optional Redemption Date (Call) at the Optional Redemption Amount (Call) plus accrued interest (if any) to such date).

(d) ***Partial redemption***: If the Notes are to be redeemed in part only on any date in accordance with Condition 9(c) (*Redemption at the option of the Issuer*), the Notes to be redeemed shall be selected by the drawing of lots in such place as the Trustee approves and in such manner as the Trustee considers appropriate, subject in each case to compliance with applicable law and the rules of any stock exchange on which the Notes are then listed and/or admitted to trading, and the notice to Noteholders referred to in Condition 9(c) (*Redemption at the option of the Issuer*) shall specify the serial numbers of the Notes so to be redeemed. If any Maximum Redemption Amount or Minimum Redemption Amount is specified in the relevant Final Terms, then the Optional Redemption Amount (Call) shall in no event be greater than the maximum or be less than the minimum so specified.

(e) ***Redemption at the option of Noteholders***: If the Put Option is specified in the relevant Final Terms as being applicable, the Issuer shall, at the option of the holder of any Note, redeem such Note on the Optional Redemption Date (Put) specified in the relevant Put Option Notice at the relevant Optional Redemption Amount (Put) together with interest (if any) accrued to such date. In order to exercise the option contained in this Condition 9(e), the holder of a Note must, not less than 30 nor more than 60 days before the relevant Optional Redemption Date (Put), deposit with any Paying Agent such Note together with all unmatured Coupons relating thereto and a duly completed Put Option Notice in the form obtainable from any Paying Agent. The Paying Agent with which a Note is so deposited shall deliver a duly completed Put Option Receipt to the

depositing Noteholder. No Note, once deposited with a duly completed Put Option Notice in accordance with this Condition 9(e), may be withdrawn; **provided**, **however**, **that** if, prior to the relevant Optional Redemption Date (Put), any such Note becomes immediately due and payable or, upon due presentation of any such Note on the relevant Optional Redemption Date (Put), payment of the redemption moneys is improperly withheld or refused, the relevant Paying Agent shall mail notification thereof to the depositing Noteholder at such address as may have been given by such Noteholder in the relevant Put Option Notice and shall hold such Note at its Specified Office for collection by the depositing Noteholder against surrender of the relevant Put Option Receipt. For so long as any outstanding Note is held by a Paying Agent in accordance with this Condition 9(e), the depositor of such Note and not such Paying Agent shall be deemed to be the holder of such Note for all purposes.

(f) ***Redemption in the case of Minimal Outstanding Amount***: The Issuer may, at any time on giving not more than 60 nor less than 30 days' notice to the Noteholders and the Trustee in accordance with Condition 20 (*Notices*) (which notice shall be irrevocable) redeem all but not some only of the Notes of the relevant series at their principal amount, together with interest accrued to the date fixed for redemption if, immediately before giving such notice, the aggregate principal amount of the Notes of such series outstanding is less than 20 per cent. of the aggregate principal amount of such series originally issued (which shall, for the avoidance of doubt, include any further Notes issued pursuant to Condition 19 (*Further Issues*)).

(g) ***Redemption at the option of the Noteholders in the event of a Change of Control*****:** A Change of Control Event will be deemed to occur if a Change of Control occurs (a "**Change of Control Event**"). If a Change of Control Event occurs, each Noteholder will have the option (the "**Change of Control Put Option**") (unless, prior to the giving of the relevant Change of Control Put Option Notice (as defined below), the Issuer has given notice to redeem the Notes in accordance with Condition 9(b) (*Redemption for tax reasons*), (c) (*Redemption at the option of the Issuer*) or (f) (*Redemption in the case of Minimal Outstanding Amount*)) to require the Issuer to redeem or, at the Issuer's option, purchase (or procure the purchase of) the Notes held by it on the Change of Control Put Date at their principal amount together with (or, where purchased, together with an amount equal to) interest (if any) accrued to but excluding the Change of Control Put Date.

Promptly upon a Change of Control Event having occurred, the Issuer shall give notice (a "**Change of Control Event Notice**") to the Noteholders in accordance with Condition 20 (*Notices*) specifying the nature of the Change of Control Event and the circumstances giving rise to it, the procedure for exercising the Change of Control Put Option and the Change of Control Put Date.

In order to exercise the Change of Control Put Option, the holder of the Note must deposit such Note with the Principal Paying Agent at its specified office at any time during normal business hours of the Principal Paying Agent, accompanied by a duly signed and completed Put Option Notice in the form (for the time being current) available from the specified office of the Principal Paying Agent (a "**Change of Control Put Option Notice**") within the period (the "**Change of Control Put Period**") of 45 days after a Change of Control Event Notice is given. No Note so deposited and option so exercised may be revoked or withdrawn.

The Notes should be delivered together with all Coupons, if any, relating to them maturing after the Change of Control Put Date, failing which the amount of any such missing unmatured Coupon will be deducted from the sum due for payment in the manner provided in Condition 10(e) (*Deduction for unmatured Coupons*). The Principal Paying Agent will issue to the Noteholder concerned a non-transferable Put Option Receipt in respect of the Note so delivered. Payment in respect of any Note so delivered will be made, if the holder duly specified a bank account in the Change of Control Put Option Notice to which payment is to be made, on the Change of Control Put Date, by transfer to that bank account and, in every other case, on or after the Change of Control Put Date against presentation and surrender or (as the case may be) endorsement of such Put Option Receipt at the specified office the Principal Paying Agent. For the purposes of these Conditions, receipts issued pursuant thereof shall be treated as if they were Notes.

The Issuer shall redeem or purchase (or procure the purchase of) the relevant Notes on the Change of Control Put Date unless previously redeemed (or purchased) and cancelled.

For the purposes of this Condition 9(g):

"**Acting in Concert**" means acting together pursuant to an agreement or understanding (whether formal or informal).

A "**Change of Control**" occurs if any person or group of persons Acting in Concert (other than one or more Qualifying Employee(s) and/or Related Persons) acquires directly or indirectly shares to which attach more than 50 per cent. of the votes attaching to the entire issued share capital of the Parent.

"**Change of Control Put Date**" is the seventh day after the last day of the Change of Control Put Period.

"**Related Persons**" with respect to any Qualifying Employee means:

(i) in the case of any individual, any spouse, family member or relative of such individual, any trust or partnership for the benefit of one or more of such individual and any such spouse, family member or relative, or the estate, executor, administrator, committee or beneficiaries of any thereof;

(ii) any trust, corporation, partnership or other person for which one or more of the Qualifying Employees and other Related Persons, directly or indirectly constitute the whole or entire stockholders, beneficiaries, partners or owners thereof, or persons beneficially holding in the aggregate the whole or entire controlling interest therein; or

(iii) any investment fund or vehicle managed, sponsored or advised by such Qualifying Employee on its behalf or any successor thereto.

"**Qualifying Employee**" means any director or employee of the Group who, on the date of the potential change of control, is employed by the Group and has been so employed for the previous one year without interruption.

(h) ***No other redemption***: The Issuer shall not be entitled to redeem the Notes otherwise than as provided in paragraphs (a) to (f) above.

(i) ***Early redemption of Zero Coupon Notes***: Unless otherwise specified in the relevant Final Terms, the Redemption Amount payable on redemption of a Zero Coupon Note at any time before the Maturity Date shall be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price from (and including) the Issue Date to (but excluding) the date fixed for redemption or (as the case may be) the date upon which the Note becomes due and payable.

Where such calculation is to be made for a period which is not a whole number of years, the calculation in respect of the period of less than a full year shall be made on the basis of such Day Count Fraction as may be specified in the Final Terms for the purposes of this Condition 9(i) or, if none is so specified, a Day Count Fraction of 30E/360.

(j) ***Purchase***: The Issuer, each of the Guarantors or any Subsidiary of each of the Guarantors may at any time purchase Notes in the open market or otherwise (including by means of any tender or exchange offer) and at any price, **provided that** all unmatured Coupons are purchased therewith. The Notes so purchased or acquired may be submitted for cancellation, or held or resold, **provided that**, while held by or on behalf of the Issuer, the Guarantors or any of their respective Subsidiaries, the Notes shall not entitle the Noteholder to vote at any meetings of the Noteholders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of the Noteholders or for the purposes of the Trust Deed or the Paying Agency Agreement.

(k) ***Cancellation***: All Notes so redeemed or purchased by the Issuer, any Guarantor or any Subsidiary of any Guarantor and any unmatured Coupons attached to or surrendered with them may be held by the Issuer, any Guarantor or any Subsidiary of any Guarantor or resold or cancelled at the Issuer's, such Guarantor's, or such Subsidiary's option.

(l) ***Notice Priority*****:** In the event of more than one notice being delivered pursuant to this Condition 9, the first in time shall prevail.

10. **Payments**

(a) ***Principal***: Payments of principal shall be made only against presentation and (**provided that** payment is made in full) surrender of Notes at the Specified Office of any Paying Agent outside the United States by cheque drawn in the currency in which the payment is due on, or by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with a bank in the Principal Financial Centre of that currency.

(b) ***Interest***: Payments of interest shall, subject to paragraph (h) below, be made only against presentation and (**provided that** payment is made in full) surrender of the appropriate Coupons at the Specified Office of any Paying Agent outside the United States in the manner described in paragraph (a) above.

(c) ***Payments in New York City***: Payments of principal or interest may be made at the Specified Office of a Paying Agent in New York City if (i) the Issuer has appointed Paying Agents outside the United States with the reasonable expectation that such Paying Agents will be able to make payment of the full amount of the interest on the Notes in the currency in which the payment is due when due, (ii) payment of the full amount of such interest at the offices of all such Paying Agents is illegal or effectively precluded by exchange controls or other similar restrictions and (iii) payment is permitted by applicable United States law.

(d) ***Payments subject to fiscal laws***: All payments in respect of the Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 11 (*Taxation*) and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the "**Code**") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or (without prejudice to the provisions of Condition 11 (*Taxation*)) any law implementing an intergovernmental approach thereto ("**FATCA**"). No commissions or expenses shall be charged to the Noteholders or Couponholders in respect of such payments.

(e) ***Deductions for unmatured Coupons***: If the relevant Final Terms specify that the Fixed Rate Note Provisions are applicable and a Note is presented without all unmatured Coupons relating thereto:

(i) if the aggregate amount of the missing Coupons is less than or equal to the amount of principal due for payment, a sum equal to the aggregate amount of the missing Coupons will be deducted from the amount of principal due for payment; **provided**, **however**, **that** if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of such missing Coupons which the gross amount actually available for payment bears to the amount of principal due for payment;

(ii) if the aggregate amount of the missing Coupons is greater than the amount of principal due for payment:

(A) so many of such missing Coupons shall become void (in inverse order of maturity) as will result in the aggregate amount of the remainder of such missing Coupons (the "**Relevant Coupons**") being equal to the amount of principal due for payment; **provided**, **however**, **that** where this sub-paragraph would otherwise require a fraction of a missing Coupon to become void, such missing Coupon shall become void in its entirety; and

(B) a sum equal to the aggregate amount of the Relevant Coupons (or, if less, the amount of principal due for payment) will be deducted from the amount of principal due for payment; **provided**, **however**, **that**, if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of the Relevant Coupons (or, as the case may be, the amount of principal due for payment) which the gross amount actually available for payment bears to the amount of principal due for payment.

Each sum of principal so deducted shall be paid in the manner provided in paragraph (a) above against presentation and (**provided that** payment is made in full) surrender of the relevant missing Coupons. No payments will be made in respect of void Coupons.

(f) ***Unmatured Coupons void***: If the relevant Final Terms specify that this Condition 10(f) is applicable or that the Floating Rate Note Provisions are applicable, on the due date for final redemption of any Note or early redemption in whole of such Note pursuant to Condition 9(b) (*Redemption for tax reasons*), Condition 9(e) (*Redemption at the option of Noteholders*), Condition 9(c) (*Redemption at the option of the Issuer*) or Condition 12 (*Events of Default*), all unmatured Coupons relating thereto (whether or not still attached) shall become void and no payment will be made in respect thereof.

(g) ***Payments on business days***: If the due date for payment of any amount in respect of any Note or Coupon is not a Payment Business Day in the place of presentation, the holder shall not be entitled to payment in such place of the amount due until the next succeeding Payment Business Day in such place and shall not be entitled to any further interest or other payment in respect of any such delay.

(h) ***Payments other than in respect of matured Coupons***: Payments of interest other than in respect of matured Coupons shall be made only against presentation of the relevant Notes at the Specified Office of any Paying Agent outside the United States (or in New York City if permitted by paragraph (c) above).

(i) ***Partial payments***: If a Paying Agent makes a partial payment in respect of any Note or Coupon presented to it for payment, such Paying Agent will endorse thereon a statement indicating the amount and date of such payment.

(j) ***Exchange of Talons***: On or after the maturity date of the final Coupon which is (or was at the time of issue) part of a Coupon Sheet relating to the Notes, the Talon forming part of such Coupon Sheet may be exchanged at the Specified Office of the Principal Paying Agent for a further Coupon Sheet (including, if appropriate, a further Talon but excluding any Coupons in respect of which claims have already become void pursuant to Condition 13 (*Prescription*). Upon the due date for redemption of any Note, any unexchanged Talon relating to such Note shall become void and no Coupon will be delivered in respect of such Talon.

11. Taxation

(a) ***Gross up***: All payments of principal and interest in respect of the Notes and the Coupons by or on behalf of the Issuer or the Guarantors shall be made free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatsoever nature imposed, levied, collected, withheld or assessed by or on behalf of the jurisdiction of incorporation of the Issuer or, as the case may be, any Guarantor or any political subdivision or any authority thereof or therein having power to tax, unless the withholding or deduction of such taxes, duties, assessments or governmental charges is required by law. In that event, the Issuer or (as the case may be) the relevant Guarantor shall pay such additional amounts as will result in the receipt by the Noteholders and the Couponholders of such amounts as would have been received by them if no such withholding or deduction had been required, except that no such additional amounts shall be payable in respect of any Note or Coupon presented for payment:

(i) by or on behalf of the Noteholder or Couponholder which is liable to such taxes, duties, assessments or governmental charges in respect of such Note or Coupon by reason of its

having some connection with the jurisdiction by which such taxes, duties, assessments or charges have been imposed, levied, collected, withheld or assessed other than the mere holding of such Note or Coupon; or

(ii) more than 30 days after the Relevant Date except to the extent that the Noteholder or Couponholder would have been entitled to such additional amounts if it had presented such Note or Coupon on the last day of such period of 30 days.

(b) ***FATCA:*** Notwithstanding anything in Condition 10 (*Payments*) to the contrary, none of the Issuer, any Guarantor, any paying agent or any other person shall be required to pay any additional amounts with respect to any withholding or deduction imposed pursuant to FATCA.

(c) ***Taxing jurisdiction***: If the Issuer or any of the Guarantors becomes subject at any time to any taxing jurisdiction other than, its jurisdiction of incorporation references in these Conditions to any jurisdiction shall be construed as references such other jurisdiction.

12. **Events of Default**

If any of the following events (each an "**Event of Default**") occurs and is continuing, the Trustee at its discretion may and, if so requested in writing by holders of at least one quarter in principal amount of the outstanding Notes or if so directed by an Extraordinary Resolution of the Noteholders, shall (subject to, in the case of the happening of any of the events mentioned in paragraph (b) below and, in relation to Limited Group Members other than the Issuer and the Guarantors only, paragraphs (c), (d), (e) and (f) below, the Trustee having certified in writing that the happening of such events is in its opinion materially prejudicial to the interests of the Noteholders and, in all cases to the Trustee having been indemnified, prefunded or provided with security to its satisfaction) give written notice to the Issuer (with a copy to each of the Guarantors) declaring the Notes to be immediately due and payable, whereupon they shall become immediately due and payable at their principal amount together with accrued interest without further action or formality:

(a) ***Non-payment:*** the Issuer fails to pay:

(i) any amount of principal in respect of the Notes on the due date for payment thereof, unless the non-payment:

(A) is caused by technical or administrative error; and

(B) is remedied within five Business Days of the due date; or

(ii) any amount of interest in respect of the Notes on the due date for payment thereof, unless the non-payment:

(A) is caused by technical or administrative error; and

(B) is remedied within seven Business Days of the due date; or

(b) ***Breach of other obligations***: the Issuer or any of the Guarantors defaults in the performance or observance of any of its other obligations under or in respect of the Notes, the Trust Deed or the Guarantee of the Notes and such default (i) is, in the reasonable opinion of the Trustee, incapable of remedy or (ii) being a default which is, in the reasonable opinion of the Trustee, capable of remedy, remains unremedied for 30 days after written notice thereof has been delivered by the Trustee to the Issuer and the Guarantors; or

(c) ***Cross-default***:

(i) any Financial Indebtedness (other than (i) Limited Recourse Trade Finance Indebtedness, (ii) any Project Finance Indebtedness or (iii) Financial Indebtedness incurred by a Limited Group Member which is not the Issuer or a Guarantor which is owed to another member of the Group which is not the Issuer or a Guarantor) of the Issuer or any Guarantor or any Limited Group Member is not paid when due (after the expiry of any originally applicable grace period);

(ii) any Financial Indebtedness (other than (i) Limited Recourse Trade Finance Indebtedness, (ii) any Project Finance Indebtedness or (iii) Financial Indebtedness incurred by a Limited Group Member which is not the Issuer or a Guarantor which is owed to another member of the Group which is not the Issuer or a Guarantor) of the Issuer or any Guarantor or any Limited Group Member:

(A) becomes prematurely due and payable;

(B) is placed on demand; or

(C) is capable of being declared by or on behalf of a creditor to be prematurely due and payable or of being placed on demand,

in each case, as a result of an event of default or any provision having a similar effect (howsoever described);

(iii) any commitment for Financial Indebtedness (other than (i) Limited Recourse Trade Finance Indebtedness, (ii) any Project Finance Indebtedness or (iii) Financial Indebtedness incurred by a Limited Group Member which is not the Issuer or a Guarantor which is owed to another member of the Group which is not the Issuer or a Guarantor) of the Issuer or any Guarantor or any Limited Group Member is cancelled or suspended as a result of an event of default or any provision having a similar effect (howsoever described); or

(iv) the Parent or any of its Subsidiaries is in default in the payment of the Apportioned Amount in respect of any Limited Recourse Trade Finance Indebtedness and that (A) such Apportioned Amount is outstanding in an aggregate principal amount of at least the greater of (x) US$50,000,000 (or its equivalent in the relevant currency of payment) and (y) three per cent. of Consolidated Net Worth and (B) is not paid by the Parent or such Subsidiary within five days of its appropriate demand by the lender of such Limited Recourse Trade Finance Indebtedness,

unless the aggregate amount of Financial Indebtedness falling within all or any of paragraphs (i) to (iii) above is less than the greater of (x) US$50,000,000 (or its equivalent in any other currency) and (y) three per cent. of Consolidated Net Worth; or

(d) ***Insolvency****:* any of the following occurs with respect to the Issuer or any Guarantor or any Limited Group Member:

(i) it is, or is deemed for the purposes of any applicable law to be, unable to pay its debts as they fall due or insolvent;

(ii) it admits its inability to pay its debts as they fall due;

(iii) by reason of actual or anticipated financial difficulties, it begins negotiations with any creditor for the rescheduling or restructuring of any of its indebtedness; or

(iv) a moratorium is declared in respect of any of its indebtedness **provided that** if a moratorium occurs in respect of the Issuer or any Guarantor or any Limited Group Member, the ending of the moratorium will not remedy any Event of Default caused by the moratorium; or

(e) ***Insolvency Proceedings***: any of the following occurs with respect to the Issuer or any Guarantor or any Limited Group Member:

(i) any step is taken with a view to a moratorium or a composition, assignment or similar arrangement with any of its creditors;

(ii) a meeting of its shareholders, directors or other officers is convened for the purpose of considering any resolution for, to petition for or to file documents with a court or any registrar for, its winding-up, administration, dissolution or judicial management or any such resolution is passed;

(iii) any person presents a petition, or files documents with a court or any registrar, for its winding-up, administration, dissolution, judicial management or reorganisation (by way of voluntary arrangement, scheme of arrangement or otherwise);

(iv) any Security Interest is enforced over any of its assets having an aggregate book value of the greater of (x) US$50,000,000 (or its equivalent in any other currency) and (y) three per cent. of Consolidated Net Worth or more;

(v) an order for its winding-up, administration, judicial management or dissolution is made;

(vi) any liquidator, trustee in bankruptcy, judicial custodian, compulsory manager, receiver, administrative receiver, administrator, receiver and manager, judicial manager, manager or similar officer is appointed in respect of it or any of its assets;

(vii) its shareholders, directors or other officers request the appointment of, or give notice of their intention to appoint, a liquidator, trustee in bankruptcy, judicial custodian, compulsory manager, receiver, administrative receiver, administrator, receiver and manager, judicial manager, manager or similar officer; or

(viii) any other analogous step or procedure is taken in any jurisdiction.

In relation to the Issuer, the (insolvency) terms referred to above shall include any steps and actions under Luxembourg law which are analogous to those described above, in particular but without limitation of the scope of paragraphs (i) to (vii) of Condition 12(e), in respect of the following Luxembourg procedures: *faillite*, *gestion contrôlée*, *suspension des paiements*, *concordat judiciaire* or *liquidation judiciaire.*

This paragraph (e) (*Insolvency proceedings*) does not apply to:

1. any step or procedure which is part of a Permitted Transaction; or

2. a petition for winding-up presented by a creditor which is (A) being contested in good faith and with due diligence or (B) frivolous or vexatious and, in any such case, is discharged, struck out or withdrawn within 21 days (in the case of the Issuer or a Guarantor) or 60 days (in the case of any other Limited Group Member); or

(f) ***Creditors' process***: (A) any attachment or sequestration affects any asset of the Issuer, any Guarantor or a Limited Group Member where the claim relating to such attachment or sequestration is for an amount of at least the greater of (x) US$50,000,000 (or its equivalent in any other currency) and (y) three per cent. of Consolidated Net Worth and is not discharged within 60 days; or (B) any distress, execution or analogous event affects any asset of the Issuer, any Guarantor or a Limited Group Member having an aggregate value of at least the greater of (x) US$50,000,000 (or its equivalent in any other currency) and (y) three per cent. of Consolidated Net Worth, and is not discharged within 21 days; or

(g) ***Cessation of business***: the Issuer, any Guarantor or a Limited Group Member ceases, or threatens to cease, to carry on business, except:

(i) as part of a Permitted Transaction; or

(ii) as a result of any disposal not prohibited by these Conditions; or

(h) ***Analogous event***: any event occurs which under the laws of (in the case of the Issuer) Luxembourg, (in the case of Trafigura Trading LLC) the State of Delaware or (in the case of Trafigura Group Pte. Ltd. and Trafigura Pte Ltd) Singapore or the jurisdiction of incorporation of any Substituted Issuer or Substituted Guarantor has an analogous effect to any of the events referred to in paragraphs (d) (*Insolvency*) to (g) (*Cessation of business*) above; or

(i) ***Guarantee not in force***: the Guarantee of the Notes is not (or is claimed by any of the Guarantors not to be) in full force and effect and is not replaced within three Business Days by a valid and enforceable guarantee.

13. **Prescription**

Claims for principal shall become void unless the relevant Notes are presented for payment within ten years of the appropriate Relevant Date. Claims for interest shall become void unless the relevant Coupons are presented for payment within five years of the appropriate Relevant Date.

14. **Replacement of Notes and Coupons**

If any Note or Coupon is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Principal Paying Agent (and, if the Notes are then listed and /or admitted to trading on any stock exchange which requires the appointment of a Paying Agent in any particular place, the Paying Agent having its Specified Office in the place required by such stock exchange), subject to all applicable laws and stock exchange requirements, upon payment by the claimant of the expenses incurred in connection with such replacement and on such terms as to evidence, security, indemnity and otherwise as the Issuer and/or the Guarantors may reasonably require. Mutilated or defaced Notes or Coupons must be surrendered before replacements will be issued.

15. **Trustee and Agents**

The Trust Deed contains provisions for the indemnification of the Trustee and for its relief from responsibility, including provisions relieving it from taking proceedings to enforce payment unless indemnified or prefunded or secured to its satisfaction, and to be paid its costs and expenses in priority to the claims of Noteholders. The Trustee is entitled to enter into business transactions with the Issuer and/or the Guarantors and any entity related to the Issuer and/or the Guarantors without accounting for any profit.

The Trustee shall be entitled to rely on reports and certificates of two Authorised Signatories of the Issuer and/or the Guarantors, as applicable, and other persons notwithstanding any limit on liability therein by reference to monetary cap or otherwise. The Issuer has entered into certain covenants in the Trust Deed to deliver a certificate to the Trustee on a semi-annual basis identifying those Subsidiaries of the Group whose net worth represents 10 per cent. or more of Consolidated Net Worth and whose net income for the relevant period represents 10 per cent. or more of Consolidated Net Earnings for such period (such certificate being referred to herein as the "**10 Per cent. List**") and who shall, for all purposes be deemed Limited Group Members. Each Subsidiary that is not on the 10 Per cent. List (the "**Other Subsidiaries**") shall be deemed a Limited Group Member unless the Trustee shall have received a certificate of two Authorised Signatories delivered to it by the Issuer within three Business Days of a request by the Trustee confirming that such Subsidiary is or was at such time or during such period an Insignificant Subsidiary.

In the exercise of its powers and discretions under these Conditions and the Trust Deed, the Trustee will have regard to the interests of the Noteholders as a class and will not be responsible for any consequence for individual holders of Notes, Coupons or Talons as a result of such holders being connected in any way with a particular territory or taxing jurisdiction.

In acting under the Paying Agency Agreement and in connection with the Notes and the Coupons, the Paying Agents act solely as agents of the Issuer, each Guarantor or, following the occurrence of a Default, they may act as agents of the Trustee and do not assume any obligations towards or relationship of agency or trust for or with any of the Noteholders or Couponholders.

The initial Paying Agent and its initial Specified Office is listed below. The initial Calculation Agent (if any) is specified in the relevant Final Terms. The Issuer and each Guarantor reserve the right (subject to the prior approval of the Trustee) at any time to vary or terminate the appointment of any Paying Agent or the Calculation Agent and to appoint a successor principal paying agent or calculation agent and additional paying agents; **provided**, **however**, **that**:

(a) the Issuer and the Guarantors shall at all times maintain a Principal Paying Agent;

(b) if a Calculation Agent is specified in the relevant Final Terms, the Issuer and the Guarantors shall at all times, whilst any relevant Note remains outstanding, maintain a Calculation Agent; and

(c) if and for so long as the Notes are admitted to listing or trading on any stock exchange which requires the appointment of a Paying Agent in any particular place, the Issuer and the Guarantors

shall maintain a Paying Agent having its Specified Office in the place required by the rules of such stock exchange.

Notice of any changes in any of the Paying Agents and Calculation Agents or in their Specified Offices shall promptly be given by the Issuer to the Noteholders in accordance with Condition 20 (*Notices*).

16. **Meetings of Noteholders; Modification and Waiver; Substitution**

(a) ***Meetings of Noteholders***: The Trust Deed contains provisions for convening meetings of Noteholders to consider matters relating to the Notes, including the modification of any provision of these Conditions or the provisions of the Trust Deed. Any such modification may be made if sanctioned by an Extraordinary Resolution. Such a meeting may be convened by the Issuer and the Guarantors (acting together) or the Trustee and shall be convened by the Trustee upon the request in writing of Noteholders holding not less than one-tenth of the aggregate principal amount of the outstanding Notes and provided it shall have been indemnified and/or secured and/or prefunded to its satisfaction. The quorum at any meeting convened to vote on an Extraordinary Resolution will be two or more Persons holding or representing more than half of the aggregate principal amount of the outstanding Notes or, at any adjourned meeting, two or more Persons being or representing Noteholders whatever the principal amount of the Notes held or represented; **provided**, **however**, **that** Reserved Matters may only be sanctioned by an Extraordinary Resolution passed at a meeting of Noteholders at which two or more Persons holding or representing not less than three-quarters or, at any adjourned meeting, one quarter of the aggregate principal amount of the outstanding Notes form a quorum. Any Extraordinary Resolution duly passed at any such meeting shall be binding on all the Noteholders and Couponholders, whether present or not.

In addition, a resolution in writing signed by or on behalf of all Noteholders who for the time being are entitled to receive notice of a meeting of Noteholders will take effect as if it were an Extraordinary Resolution. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Noteholders.

(b) ***Modification and Waiver***: The Trustee may agree, without the consent of the Noteholders or the Couponholders, to (i) any modification of any provision of these Conditions, the Paying Agency Agreement, or the Trust Deed which is in its opinion of a formal, minor or technical nature or is made to correct a manifest error or to comply with mandatory provisions of the law and (ii) any other modification (except as mentioned in the Trust Deed or in respect of a Reserved Matter) and any waiver or authorisation of any breach or proposed breach of any provision of these Conditions, the Paying Agency Agreement, or the Trust Deed (other than a proposed breach or breach relating to the subject of a Reserved Matter) which is in the opinion of the Trustee not materially prejudicial to the interests of the Noteholders, **provided that** it shall not agree any such waiver in contravention of any express direction by an Extraordinary Resolution or of a request in writing by the holders of not less than 25 per cent. of the aggregate principal amount of Notes then outstanding. Any such modification, authorisation or waiver shall be binding on the Noteholders and Couponholders. Unless the Trustee agrees otherwise, any such authorisation, waiver or modification shall be notified to the Noteholders as soon as practicable thereafter.

Additionally, the Issuer may, subject to Condition 7A, vary or amend these Conditions, the Trust Deed and/or the Agency Agreement to give effect to certain amendments without any requirement for the consent or approval of the Noteholders as described in Condition 7A and the Trustee shall agree to such variations or amendments on the basis set out in Condition 7A.

(c) ***Substitution:*** The Trust Deed contains provisions whereby the Trustee shall agree, without the consent of the Noteholders, to the substitution of the Issuer or any Guarantor (or any substituted company for the Issuer or a Guarantor), in the case of the Issuer, for itself as principal debtor (a "**Substituted Issuer**") or, in the case of a Guarantor, as unconditional and irrevocable guarantor (a "**Substituted Guarantor**"), as the case may be, with any Subsidiary or Affiliate of the Parent in place of the Issuer or the relevant Guarantor (or any previously Substituted Issuer or Substituted Guarantor under this Condition) as a new principal debtor under the Notes and the Coupons or a new guarantor under the Guarantee of the Notes, **provided that** (i) the Parent shall have provided to the Trustee a certificate from two Authorised Signatories of the Parent confirming that the proposed substitution will not be materially prejudicial to the interests of the

Noteholders, (ii) the Substitution Conditions (as defined below) have been satisfied, and (iii) no payment in respect of the Notes or the Coupons is at the relevant time overdue or in default.

Such substitution may take place only if: (i) the Substituted Issuer or Substituted Guarantor, as the case may be, shall agree to indemnify and hold harmless each Noteholder and the Trustee against any tax, duty, assessment or governmental charge which is or may be imposed on, incurred by or levied on it by (or by any authority in or of) the jurisdiction of the country of the Substituted Issuer's or Substituted Guarantor's residence for tax purposes and, if different, of its incorporation with respect to any Note or Coupon or the Guarantee of the Notes and which would not have been so imposed had the substitution not been made, as well as against any tax, duty, assessment or governmental charge, and any liability, charge, cost or expense, in connection with the substitution; (ii) all action, conditions and things required to be taken, fulfilled and done (including the obtaining of any necessary consents or approvals) to ensure that the Trust Deed, the Notes and Coupons represent valid, legally binding and enforceable obligations of the Substituted Issuer or the Trust Deed and the Guarantee of the Notes represents a valid, legally binding and enforceable obligation of the Substituted Guarantor, as the case may be, have been taken, fulfilled and done and are in full force and effect; (iii) the Substituted Issuer or Substituted Guarantor shall have become party to the Paying Agency Agreement and the Trust Deed with any appropriate consequential amendments, as if it had been an original party to it; (iv) the obligations of any Substituted Issuer under the Notes and the Coupons shall be unconditionally and irrevocably guaranteed by each of the Guarantors (unless a Guarantor has been substituted by another entity pursuant to the terms hereof, in which case, the Substituted Guarantor shall unconditionally and irrevocably guarantee the Notes and Coupons in place of such Guarantor); (v) legal opinions addressed to the Trustee shall have been delivered from independent legal advisers of recognised standing in each jurisdiction referred to in (i) above, the jurisdiction of the Issuer (if different) and in England as to the fulfilment of the preceding conditions of this Condition 16(c); and (vi) the Issuer shall have given at least 14 days' prior notice of such substitution to the Noteholders in accordance with Condition 20 (*Notices*), stating that copies, and pending execution, the agreed text, of all documents in relation to the substitution which are referred to above, or which might otherwise reasonably be regarded as material to Noteholders, will be available for inspection at the specified office of each of the Paying Agents. Conditions (i) to (vi) shall together constitute the "**Substitution Conditions**".

In the event that an entity will be substituted as a guarantor in place of Trafigura Group Pte. Ltd., such entity shall (i) own directly or indirectly 100 per cent. of the issued and outstanding ordinary shares of the Issuer; (ii) have, pursuant to a voluntary corporate reorganisation of the Group (the "**Group**" for such purposes being Trafigura Group Pte. Ltd. and its consolidated subsidiaries as at the date hereof), become the principal consolidating entity of the Group; and (iii) consolidate substantially all of the consolidated assets and liabilities which appeared on the balance sheet of Trafigura Group Pte. Ltd. on the day immediately prior to the effective date of the voluntary corporate reorganisation. The Trustee shall be entitled to rely on a certificate from two Authorised Signatories of such Substituted Guarantor that such entity fulfils the requirement of this paragraph.

For the purposes of this Condition, "**Affiliate**" means a person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person specified.

The Issuer will notify the Trustee and Noteholders as soon as reasonably practicable following a substitution in accordance with Condition 20 (*Notices*) and such substitution shall become effective upon the publication of such notice.

In connection with any proposed substitution as aforesaid and in connection with the exercise of its trusts, powers, authorities and discretions (including but not limited to those referred to in this Condition 16(c) and the Trust Deed), the Trustee shall have regard to the general interests of the Noteholders as a class but shall not have regard to the consequences of any substitution or such exercise for individual Noteholders. In connection with any substitution or such exercise as aforesaid, no Noteholder shall be entitled to claim, whether from the Issuer, the Substituted Issuer, any Guarantor or any Substituted Guarantor or the Trustee or any other person, any indemnification or payment in respect of any tax consequence of any such substitution or any such exercise upon any individual Noteholders except to the extent already provided in Condition

16 and/or any undertaking given in addition thereto or in substitution therefor pursuant to the Trust Deed.

17. **Enforcement**

The Trustee may at any time, at its discretion and without notice, institute such proceedings as it thinks fit to enforce its rights under the Trust Deed in respect of the Notes and/or the Guarantee of the Notes, but it shall not be bound to do so unless:

(a) it has been so requested in writing by the holders of at least one quarter in principal amount of the outstanding Notes or has been so directed by an Extraordinary Resolution; and

(b) it has been indemnified, prefunded or provided with security to its satisfaction.

No Noteholder may proceed directly against the Issuer or the Guarantors unless the Trustee, having become bound to do so, fails to do so within a reasonable time and such failure is continuing.

18. **Financial Information Covenant**

For so long as any Notes are outstanding the Issuer and the Guarantors will deliver to the Trustee and the Principal Paying Agent within 120 days of the end of each financial year a copy in the English language of the Group's audited consolidated annual financial statements and procure that copies of the same are made available (A) on the website of Euronext Dublin and (B) for inspection by Noteholders and Couponholders at the Specified Offices of the Paying Agents as soon as practicable thereafter.

In addition, for so long as any Notes are outstanding, the Issuer and the Guarantors will deliver to the Trustee and the Principal Paying Agent within 120 days of the end of the first six months in each financial year, a copy in the English language of the Group's unaudited consolidated half year financial statements and procure that copies of the same are made available (A) on the website of Euronext Dublin and (B) for inspection by Noteholders and Couponholders at the Specified Offices of the Paying Agents as soon as practicable thereafter.

19. **Further Issues**

The Issuer may from time to time, without the consent of the Noteholders or the Couponholders, create and issue further notes having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest) so as to form a single Series with the Notes.

20. **Notices**

Notices to the Noteholders shall be valid if published in a leading English language daily newspaper published in London (which is expected to be the Financial Times) and, in the case of Notes which are listed on the Official List of Euronext Dublin and admitted to trading on the regulated market of Euronext Dublin, and for so long as the rules of that exchange so require, filed with the Companies Announcements Office of Euronext Dublin and published on the website of Euronext Dublin (*http://www.ise.ie*). If such publication is not practicable, publication will be made in a leading English language daily newspaper having general circulation in Europe. Any such notice shall be deemed to have been given on the date of first publication (or if required to be published in more than one newspaper, on the first date on which publication shall have been made in all the required newspapers). Couponholders shall be deemed for all purposes to have notice of the contents of any notice given to the Noteholders.

21. **Currency Indemnity**

If any sum due from the Issuer in respect of the Notes or the Coupons or any order or judgment given or made in relation thereto has to be converted from the currency (the "**first currency**") in which the same is payable under these Conditions or such order or judgment into another currency (the "**second currency**") for the purpose of (a) making or filing a claim or proof against the Issuer, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation to the Notes, the Issuer shall indemnify each Noteholder, on the written demand of such Noteholder addressed to the Issuer and delivered to the Issuer or to the Specified Office of the Principal Paying Agent, against any loss suffered as a result of any discrepancy between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the

rate or rates of exchange at which such Noteholder may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof.

This indemnity constitutes a separate and independent obligation of the Issuer and shall give rise to a separate and independent cause of action.

22. **Rounding**

For the purposes of any calculations referred to in these Conditions (unless otherwise specified in these Conditions or the relevant Final Terms), (a) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with 0.000005% being rounded up to 0.00001%), (b) all United States dollar amounts used in or resulting from such calculations will be rounded to the nearest cent (with one half cent being rounded up), (c) all Japanese Yen amounts used in or resulting from such calculations will be rounded downwards to the next lower whole Japanese Yen amount, and (d) all amounts denominated in any other currency used in or resulting from such calculations will be rounded to the nearest two decimal places in such currency, with 0.005 being rounded upwards.

23. **Governing Law and Jurisdiction**

(a) ***Governing law***: The Notes, the Trust Deed and any non-contractual obligations arising out of, or in connection with them, are governed by, and shall be construed in accordance with, English law.

(b) ***Jurisdiction***: Each of the Issuer and the Guarantors (i) agrees for the benefit of the Trustee, the Paying Agents, the Noteholders and the Couponholders that the courts of England shall have exclusive jurisdiction to settle any dispute (a "**Dispute**") arising out of or in connection with the Notes (including any non-contractual obligation arising out of or in connection with the Notes); (ii) agrees that those courts are the most appropriate and convenient courts to settle any Dispute and, accordingly, that it will not argue that any other courts are more appropriate or convenient; and (iii) designates a person in England to accept service of any process on its behalf. Nothing contained in this Condition shall limit the right of any of the Noteholders from taking proceedings relating to a Dispute ("**Proceedings**") in any other courts with jurisdiction and that, to the extent allowed by law, any of the Noteholders may take concurrent Proceedings in any number of jurisdictions.

(c) ***Process Agent***: Each of the Issuer and the Guarantors agree that the documents which start any Proceedings and any other documents required to be served in relation to those Proceedings may be served on any of them by being delivered to Trafigura Limited at its registered office (being 14 St. George Street, London W1S 1FE, United Kingdom as of the Issue Date) or to such other person with an address in England or Wales and/or at such other address in England or Wales as the Issuer and the Guarantors may specify by notice to the Noteholders in accordance with Condition 20 (*Notices*).

Nothing in this paragraph shall affect the right of any Noteholder to serve process in any other manner permitted by law. This Condition applies to Proceedings in England and to Proceedings elsewhere.

(d) ***Third Parties***: No person shall have any right to enforce any term or Condition of this Note, the Trust Deed or the Paying Agency Agreement under the Contracts (Rights of Third Parties) Act 1999.

FORM OF FINAL TERMS

Set out below is the form of Final Terms which will be completed for each Tranche of Notes issued under the Programme.

[PROHIBITION OF SALES TO EEA AND UK RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**") or in the United Kingdom. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**") or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA or in the United Kingdom has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA or in the United Kingdom may be unlawful under the PRIIPs Regulation.]

[MiFID II Product Governance / Professional investors and ECPs only target market – Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in [Directive 2014/65/EU, as amended ("**MiFID II**")[[MiFID II]/; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. [*Consider any negative target market*]. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[**Notification under Section 309B(1)(c) of the Securities and Futures Act (Chapter 289) of Singapore** – Solely for the purposes of its obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the Securities and Futures Act (Chapter 289 of Singapore) (the "**SFA**"), the Issuer has determined, and hereby notifies all relevant persons (as defined in section 309A of the SFA) that the Notes are ["prescribed capital markets products"]/["capital markets products other than prescribed capital markets products"] (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).][1]

Final Terms dated [•]

TRAFIGURA FUNDING S.A.
Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]

LEI: 549300IDCRNFW0C0TJ66

Guaranteed by TRAFIGURA GROUP PTE. LTD., TRAFIGURA TRADING LLC AND TRAFIGURA PTE LTD
under the EUR 3,000,000,000

Euro Medium Term Note Programme

PART A – CONTRACTUAL TERMS

[Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the "**Conditions**") set forth in the Base Prospectus dated 11 September 2020 [and the supplemental base prospectus dated [•]] which [together] constitute[s] a base prospectus (the "**Base Prospectus**") for the purposes of [Regulation (EU) 2017/1129 (the "**Prospectus Regulation**")]/[the Prospectus Regulation]. [This document constitutes the Final Terms of the Notes described herein for the purposes of the

[1] Issuer to consider, prior to offer of Notes, whether the Notes are prescribed capital market products.

Prospectus Regulation and must be read in conjunction with the Base Prospectus in order to obtain all the relevant information].[2]

Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of these Final Terms and the Base Prospectus. The Base Prospectus has been published on the website of Euronext Dublin (*http://www.ise.ie*) and is also available for viewing, and electronic copies may be obtained at https://www.trafigura.com/financials/. Once issued, the Final Terms will be available on the website of Euronext Dublin (*http://www.ise.ie*) and at https://www.trafigura.com/financials/ .

[In accordance with the Prospectus Regulation, no prospectus is required in connection with the issuance of the Notes described herein.][3]

[*Include whichever of the following apply or specify as "Not Applicable" (N/A). Note that the numbering should remain as set out below, even if "Not Applicable" is indicated for individual paragraphs (in which case the sub-paragraphs of the paragraphs which are not applicable can be deleted). Italics denote guidance for completing the Final Terms.*]

1.	(i)	Issuer:	Trafigura Funding S.A.
	(ii)	Guarantors:	Trafigura Group Pte. Ltd., Trafigura Trading LLC and Trafigura Pte Ltd
2.	[(i)	Series Number:]	[•]
	[(ii)	Tranche Number:]	[•]
	[(iii)	Date on which the Notes become fungible:]	[Not Applicable/The Notes shall be consolidated, form a single series and be interchangeable for trading purposes with the [•] on [[•]/the Issue Date/exchange of the Temporary Global Note for interests in the Permanent Global Note, as referred to in paragraph 22 below [which is expected to occur on or about [•]].]
3.	Specified Currency or Currencies:		[•]
4.	Aggregate Nominal Amount:		[•]
	[(i)]	[Series]:	[•]
	[(ii)	Tranche:	[•]]
5.	Issue Price:		[[•] per cent. of the Aggregate Nominal Amount [plus accrued interest from [•]]
6.	(i)	Specified Denominations:	[•] *(N.B. Where multiple denominations above EUR 100,000 or equivalent are being used the following sample wording should be followed:* *"EUR 100,000 and integral multiples of EUR 1,000 in excess thereof up to EUR 199,000. No Notes in definitive form will be issued with a*

2 Delete where the Notes are neither admitted to trading on a regulated market in the European Economic Area nor offered in the European Economic Area in circumstances where a prospectus is required to be published under the Prospectus Regulation.

3 Delete where the Notes are neither admitted to trading on a regulated market in the European Economic Area nor offered in the European Economic Area in circumstances where a prospectus is required to be published under the Prospectus Regulation.

		denomination above EUR 199,000).[4]
	(ii) Calculation Amount:	[•]
7.	(i) Issue Date:	[•]
	(ii) Interest Commencement Date:	[[•]/Issue Date/Not Applicable]
8.	Maturity Date:	[•]
		[If the Maturity Date is less than one year from the Issue Date and either (a) the issue proceeds are received by the Issuer in the United Kingdom, or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, (i) the Notes must have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be sold only to "professional investors" or (ii) another applicable exemption from section 19 of the FSMA must be available].
9.	Interest Basis:	[[•] per cent. Fixed Rate] [•] [EURIBOR/LIBOR]+/– [•] per cent. Floating Rate] [Benchmark Discontinuation: Condition 7A is applicable] [Zero Coupon] (further particulars specified in paragraph [14/15/16] below)
10.	Redemption/Payment Basis:	Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the Maturity Date at [100] per cent. of their nominal amount.
11.	Change of Interest or Redemption/Payment Basis:	[Applicable/Not Applicable]
12.	Put/Call Options:	[Investor Put] [(Change of Control Put Option)] [Issuer Call] [(further particulars specified in paragraphs [17/18/19] below)]
13.	[Date [Board] approval for issuance of Notes [and Guarantee] [respectively]] obtained:	[•] [and [•], respectively

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

14.	**Fixed Rate Note Provisions**	[Applicable/Not Applicable]

[4] Note that the Specified Denomination plus integral multiples option should not be utilised in respect of Notes where item 22 specifies "Temporary Global Note exchangeable for Definitive Notes" or "Permanent Global Note exchangeable for Definitive Notes".

	(i)	Rate[(s)] of Interest:	[•] per cent. per annum payable in arrear on each Interest Payment Date
	(ii)	Interest Payment Date(s):	[•] in each year
	(iii)	Fixed Coupon Amount[(s)]:	[•] per Calculation Amount
	(iv)	Broken Amount(s):	[•] per Calculation Amount, payable on the Interest Payment Date falling [in/on] [•]
	(v)	Day Count Fraction:	[30/360 / 30E/360 / 30E/360 (ISDA) / Actual/Actual (ICMA) / Actual/Actual (ISDA) / Actual/Actual / Actual/360 / Actual/365 / Actual/365 (Fixed) / Eurobond basis]
	(vi)	ISDA Definitions	[2000/2006]
15.	**Floating Rate Note Provisions**		[Applicable/Not Applicable]
	(i)	Interest Period(s):	[•]
	(ii)	Specified Period:	[•] *(Specified Period and Specified Interest Payment Dates are alternatives. A Specified Period, rather than Specified Interest Payment Dates, will only be relevant if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention. Otherwise, insert "Not Applicable")*
	(iii)	Specified Interest Payment Dates:	[Not Applicable/[•], subject to adjustment in accordance with the Business Day Convention set out in (v) below] *(Specified Period and Specified Interest Payment Dates are alternatives. If the Business Day Convention is the FRN Convention, Floating Rate Convention, or Eurodollar Convention, insert "Not Applicable")*
	(iv)	[First Interest Payment Date]:	[•]
	(v)	Business Day Convention:	[Following Business Day Convention/ Modified Following Business Day Convention/Modified Business Day Convention/Preceding Business Day Convention/FRN Convention/Floating Rate Convention/Eurodollar Convention/No Adjustment]
	(vi)	Additional Business Centre(s):	[Not Applicable/[•]]
	(vii)	Manner in which the Rate(s) of Interest is/are to be determined:	[Screen Rate Determination/ISDA Determination]
	(viii)	Party responsible for calculating the Rate(s) of Interest and/or Interest Amount(s) (if not the Principal Paying Agent):	[•] shall be the Calculation Agent

	(ix)	Screen Rate Determination:	[Applicable/Not Applicable]
		• Reference Rate:	[•] [EURIBOR/ LIBOR]
		• Interest Determination Date(s):	[•]
		• Relevant Screen Page:	[•]
		• Relevant Time:	[•]
		• Relevant Financial Centre	[•]
		• Benchmark Discontinuation	[Applicable/Not Applicable]
	(x)	ISDA Determination:	[Applicable/Not Applicable]
		• Floating Rate Option:	[•]
		• Designated Maturity:	[•]
		• Reset Date:	[•]
		• ISDA Definitions:	[2000/2006]
	(xi)	Linear Interpolation:	[Not Applicable / Applicable – the Rate of Interest for the [long/short] [first/last] Interest Period shall be calculated using Linear Interpolation (*specify for each short or long interest period*)]
	(xii)	Margin(s):	[[+/-][•] per cent. per annum/Not Applicable]
	(xiii)	Minimum Rate of Interest:	[[•] per cent. per annum/Not Applicable]
	(xiv)	Maximum Rate of Interest:	[[•] per cent. per annum/Not Applicable]
	(xv)	Day Count Fraction:	[30/360 / 30E/360 / 30E/360 (ISDA) / Actual/Actual (ICMA) / Actual/Actual (ISDA) / Actual/Actual / Actual/360 / Actual/365 / Actual/365 (Fixed) / Eurobond basis]
16.	**Zero Coupon Note Provisions**		[Applicable/Not Applicable]
	(i)	Accrual Yield:	[•] per cent. per annum
	(ii)	Reference Price:	[•]
	(iii)	Day Count Fraction:	[30/360 / 30E/360 / 30E/360 (ISDA) / Actual/Actual (ICMA) / Actual/Actual (ISDA) / Actual/Actual / Actual/360 / Actual/365 / Actual/365 (Fixed) / Eurobond basis]
	(iv)	ISDA Definitions	[2000/2006]

PROVISIONS RELATING TO REDEMPTION

17.	Call Option		[Applicable/Not Applicable]
	(i)	Optional Redemption Date(s):	[•]

	(ii) Optional Redemption Amount(s):	[•] per Calculation Amount
	(iii) If redeemable in part:	
	(a) Minimum Redemption Amount:	[•] per Calculation Amount
	(b) Maximum Redemption Amount	[•] per Calculation Amount
	(iv) Notice period:	[•]
18.	Put Option	[Applicable/Not Applicable]
	(i) Optional Redemption Date(s):	[•]
	(ii) Optional Redemption Amount(s):	[•] per Calculation Amount
	(iii) Notice period:	[•]
19.	Change of Control Put Option	[Applicable/Not Applicable]
20.	Final Redemption Amount	[•] per Calculation Amount
21.	Early Redemption Amount (Tax)	[Not Applicable / [•] per Calculation Amount]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

22.	Form of Notes:	Bearer Notes: [Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes in the limited circumstances specified in the Permanent Global Note] [Temporary Global Note exchangeable for Definitive Notes on [•] days' notice] [Permanent Global Note exchangeable for Definitive Notes in the limited circumstances specified in the Permanent Global Note]
23.	Additional Financial Centre(s):	[Not Applicable/*give details*.]
24.	Talons for future Coupons or Receipts to be attached to Definitive Notes (and dates on which such Talons mature):	[Yes/No. As the Notes have more than 27 coupon payments, talons may be required if, on exchange into definitive form, more than 27 coupon payments are left.]
25.	Relevant Benchmark[s]:	[[*specify benchmark*] is provided by [*administrator legal name*]. As at the date hereof, [[*administrator legal name*][appears]/[does not appear]] in the register of administrators and benchmarks established and maintained by ESMA pursuant to Article 36 (*Register of administrators and benchmarks*) of the Benchmark Regulation]/[*Not Applicable*]]

THIRD PARTY INFORMATION

[(Relevant third party information) has been extracted from (specify source).] [Each of the] [The]

Issuer [and the Guarantor(s)] confirms that such information has been accurately reproduced and that, so far as it is aware, and is able to ascertain from information published by (specify source), no facts have been omitted which would render the reproduced information inaccurate or misleading.]

The Issuer and each Guarantor accepts responsibility for the information contained in these Final Terms.

Signed on behalf of **TRAFIGURA FUNDING S.A.**:

By: ....
Duly authorised

By: ....
Duly authorised

Signed on behalf of **TRAFIGURA GROUP PTE. LTD.**:

By: ....
Duly authorised

By: ....
Duly authorised

Signed on behalf of **TRAFIGURA TRADING LLC**:

By: ....
Duly authorised

By: ....
Duly authorised

Signed on behalf of **TRAFIGURA PTE LTD**:

By: ....
Duly authorised

By: ....
Duly authorised

PART B – OTHER INFORMATION

1.	**LISTING AND ADMISSION TO TRADING**	[Application has been made by the Issuer (or on its behalf) for the Notes to be admitted to trading on the regulated market of the Irish Stock Exchange plc trading as Euronext Dublin/[•] with effect from [•].] [Not Applicable.] The total expenses related to admission to trading are estimated to be [EUR1,000/[•]].

2. **INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE ISSUE/OFFER**

[Save for any fees payable to the [Managers/Dealers], so far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer. The [Managers/Dealers] and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform other services for, the Issuer [and the Guarantor] and [its/their] affiliates in the ordinary course of business. (Amend as appropriate if there are other interests)]

[•]

3. **REASONS FOR THE OFFER AND ESTIMATED NET PROCEEDS**

Reasons for the offer:	[•] [See ["Use of Proceeds"] in [Base] Prospectus/Give details] (See ["Use of Proceeds"] wording in [Base] Prospectus – if reasons for offer different from what is disclosed in the [Base] Prospectus, give details here.)
Estimated net proceeds:	[•]

4. **[Fixed Rate Notes only – YIELD**

Indication of yield:

[Floating Rate Notes only – HISTORIC INTEREST RATES

Details of historic [LIBOR/EURIBOR] rates can be obtained from [Reuters].]

5. **OPERATIONAL INFORMATION**

ISIN Code:	[•]
Common Code:	[•]
[FISN:	[See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]
[CFI Code:	[See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN/Not Applicable/Not Available]

			(If the CFI and/or FISN is not required or requested, it/they should be specified to be "Not Applicable".)
6.	**DISTRIBUTION**		
	(i)	Method of distribution:	[Syndicated/Non-syndicated]
	(ii)	If syndicated:	[Not Applicable]
		(a) Names and addresses of Managers and underwriting commitments:	[•]
		(b) Stabilising Manager(s) (if any):	[Not Applicable/[•]]
	(iii)	If non-syndicated, name and address of Dealer:	[Not Applicable/[•]]
	(iv)	U.S. Selling Restrictions:	[TEFRA C/TEFRA D/TEFRA Not Applicable]
	(v)	Prohibition of Sales to EEA and UK Retail Investors	[Applicable]/[Not Applicable]

SUMMARY OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM

Clearing System Accountholders

Each Global Note will be in bearer form. Consequently, in relation to any Tranche of Notes represented by a Global Note, references in the Conditions to "Noteholder" are references to the bearer of the relevant Global Note which, for so long as the Global Note is held by a depositary or a common depositary, will be that depositary or common depositary.

Each of the persons shown in the records of Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system as being entitled to an interest in a Global Note (each an "**Accountholder**") must look solely to Euroclear and/or Clearstream, Luxembourg and/or such other relevant clearing system (as the case may be) for such Accountholder's share of each payment made by the Issuer or the Guarantors to the bearer of such Global Note and in relation to all other rights arising under the Global Note. The extent to which, and the manner in which, Accountholders may exercise any rights arising under the Global Note will be determined by the respective rules and procedures of Euroclear and Clearstream, Luxembourg and any other relevant clearing system from time to time. For so long as the relevant Notes are represented by the Global Note, Accountholders shall have no claim directly against the Issuer or the Guarantors in respect of payments due under the Notes and such obligations of the Issuer and the Guarantors will be discharged by payment to the bearer of the Global Note.

Conditions applicable to Global Notes

Each Global Note will contain provisions which modify the Conditions as they apply to the Global Note. The following is a summary of certain of those provisions:

Payments: All payments in respect of the Global Note will be made against presentation and (in the case of payment of principal in full with all interest accrued thereon) surrender of the Global Note to or to the order of any Paying Agent and will be effective to satisfy and discharge the corresponding liabilities of the Issuer in respect of the Notes. On each occasion on which a payment of principal or interest is made in respect of the Global Note, the Issuer shall procure that the payment is noted in a schedule thereto.

Payment Business Day: In the case of a Global Note, shall be: if the currency of payment is euro, any day which is a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or, if the currency of payment is not euro, any day which is a day on which dealings in foreign currencies may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre.

Exercise of put option: In order to exercise the option contained in Condition 9(e) (*Redemption at the option of Noteholders*) the bearer of the Permanent Global Note must, within the period specified in the Conditions for the deposit of the relevant Note and put notice, give written notice of such exercise to the Principal Paying Agent specifying the principal amount of Notes in respect of which such option is being exercised. Any such notice will be irrevocable and may not be withdrawn.

Partial exercise of call option: In connection with an exercise of the option contained in Condition 9(c) (*Redemption at the option of the Issuer*) in relation to some only of the Notes, the Permanent Global Note may be redeemed in part in the principal amount specified by the Issuer in accordance with the Conditions and the Notes to be redeemed will not be selected as provided in the Conditions but in accordance with the rules and procedures of Euroclear and Clearstream, Luxembourg (to be reflected in the records of Euroclear and Clearstream, Luxembourg as either a pool factor or a reduction in principal amount, at their discretion).

Notices: Notwithstanding Condition 20 (*Notices*), while all the Notes are represented by a Permanent Global Note (or by a Permanent Global Note and/or a Temporary Global Note) and the Permanent Global Note is (or the Permanent Global Note and/or the Temporary Global Note are) deposited with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system, notices to Noteholders may be given by delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and, in any case, such notices shall be deemed to have been given to the Noteholders in accordance with Condition 20 (*Notices*) on the date of delivery to Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system, except that (i) for so long as the Notes are listed on the Official List of Euronext Dublin

and its rules so require, all notices to holders will also be published by the Issuer by delivery to the Companies Announcement Office in Dublin and on the website of Euronext Dublin (*http://www.ise.ie*); and (ii) in the case of Notes listed, traded or quoted on any other listing authority, stock exchange and/or quotation system, the requirements of such other listing authority, stock exchange or quotation system are complied with.

USE OF PROCEEDS

The net proceeds of the issue of each Tranche of Notes will be applied by the Group for general corporate purposes.

DESCRIPTION OF THE GROUP

Until 30 September 2015, the Group's reference parent company (meaning the Group's consolidating entity but not the top holding company) was Trafigura Beheer B.V. ("**TBBV**"), a company incorporated under the laws of the Netherlands. On 30 September 2015, an entity called Trafigura Group Pte. Ltd. (the "**Company**" or "**TGPL**") incorporated in Singapore under the Companies Act, Chapter 50 of Singapore (with registration number 201017488D) assumed the role of reference parent company for the Group. The Company is a private limited liability company incorporated on 18 August 2010 and existing under the laws of Singapore. The registered office of the Company is at 10 Collyer Quay, Ocean Financial Centre, #29-00 Singapore 049315 and its telephone number is +65 6319 2960. The Company was incorporated for an indefinite duration and has no other commercial name.

Competitive Strengths

The Company believes that the Group's success is built upon the following combination of key competitive strengths:

Leading market position in the global commodity trading industry

The Group is one of the leading traders in the segments in which it operates.

The global competitive environment for physical commodities traders has evolved over the last few years. The Group operates today in the market space previously dominated by the major producers that are now predominantly focusing on upstream exploration and production, and have reduced their involvement in distribution. There is also an increasing view that genuine global scale is required for commodity traders to be successful, apart from specific niche players. Indeed, larger firms, with greater access to liquidity and logistics assets, significant IT infrastructure and better access to proprietary information, on commodity flows across geographies and commodities, can access and capture the strategic trading volumes and continue to be profitable; in particular, in times of lower volatility, when global commodity margins are under pressure. As a result, a consolidation in the industry is being witnessed, putting mid-tier companies under pressure, while global players such as the Group are becoming more prominent. These changes provide the Group with scope for growth in its core commodity activities.

Long-term competitiveness in the industry is achieved through trade volume and market share. The Group's scale is a significant advantage versus product focused niche traders that profit more from regional logistics than global arbitrage.

In the financial year ended 30 September 2019, the Group traded approximately 6.1 million barrels of physical oil per day. Although there is no published market share information, the Group estimates that its volumes represent about 3-5 per cent. of the highly fragmented world oil market, or around 7-10 per cent. of the 'tradable market' (i.e. volumes that are not handled by producers directly to consumers). The Group trades the second largest volume of oil and petroleum products for an independent trading company. In addition, based on its own market intelligence, the Group believes to be world's second largest independent trader of Liquified Natural Gas ("**LNG**"). In non-ferrous metals, the Group is also the second largest independent trader, with estimated market shares in the tradable market ranging from 15 to 50 per cent. depending on the commodity.

The Group is one of the only three truly global oil and metals traders, the others being Glencore (although it has become more of a marketer of its own production) and Vitol.

Extensive global network

The Group's operations are geographically diversified with exposure to high growth supply and demand regions. The Group has an extensive global network and manages its activities via 80 offices in 41 countries organised across Europe, Asia, Australia, North America, Latin America and Africa (as at 30 September 2019), employing over 5,106 full-time employees on average over the financial year. Noting that, as at 30 September 2019, total number of Group employees was 8,824 (4,615 the Group and 4,209 Nyrstar).

The Group believes that its scale and global footprint represent a key strength allowing it to improve its access to constantly evolving global commodity trade flows while helping to mitigate its exposure to

regional risks. The Group's local presence, knowledge and relationships in different regions provide it with first hand market intelligence and information to enable it to identify and execute arbitrage opportunities. Furthermore, its local presence provides insight into macro drivers such as foreign exchange fluctuations, government policies, upstream commodity operations, and transport.

Highly diversified business model

The Group's business activities are focused on two main areas, namely trading, and industrial assets and investments that complement and enhance the trading activities. These activities are complementary to each other and help smooth income volatility resulting from the natural cycles of the commodities trading industry. Within its trading and industrial assets businesses, the Group's activities are diversified in terms of products traded and handled as well as geographical presence and types of supplier/customer base.

The Group is one of the most diverse global commodities firms in terms of products, geographies, suppliers and customers and one of few physical commodities firms with such breadth. It focuses on two asset classes: oil and petroleum products, and metals and minerals. It covers the main product categories within these fields, including some of the world's most actively traded commodities such as: crude oil, gasoline, distillates, alumina, non-ferrous concentrates, aluminium, copper, zinc and coal.

The Group has a diverse customer base with no single external customer representing more than four per cent. of turnover for oil and petroleum products (apart from the Group affiliated company, Puma Energy), and two per cent. for metals and minerals. In the oil and petroleum products business, the Group transacts with a diverse customer base located around the globe, including electricity utilities, oil refiners, major distributors, and state owned oil companies. In metals and minerals, the Group's broad customer base ranges from mining companies to smelters, and refined metals retailers. For the year ended 30 September 2019, the Group's top 10 customers (excluding Puma Energy) in either business constitute less than 30 per cent. of revenues for respective divisions.

The diversity of the Group's commodities offerings contributes to a reduced risk profile, both on the market side and in terms of spreading credit risk among a wider base of market counterparties.

Solid industrial asset base

The Group's business model is focused on balancing global supply and commodity trade flows and exploiting natural, low risk physical arbitrage opportunities.

The key to creating arbitrage opportunities is through increasing trading volumes by securing supply and off take contracts, as well as controlling logistical instruments (e.g. time charters, storage facilities, ports etc.). The Group's investments, whether in the oil or metals and minerals sector are focused on opportunities that provide complementary volume flow to the trading business, open up new markets and create recurrent, sustainable income sources.

The Group's trading activities are supported by a solid base of fixed midstream, downstream and mining assets. Through its selected asset investments, the Group has an established global presence throughout the value chain. The Group's industrial assets amounted to USD 9,079 million as of 30 September 2019 and USD 8,031 million as of 31 March 2020. These fixed assets correspond to the Group’s investment in Puma Energy Group, the Group’s oil storage and distribution assets, of which the Group holds a legal beneficial interest of 49.98 per cent. in Puma Energy Group; Impala Terminals, the Group’s metals and minerals warehousing division and logistics provider; Nyrstar, the world’s third largest producer of zinc metal; the Group’s oil storage and export terminals (e.g. fully owned Petromining terminal in Argentina); 24 per cent. owned Indian refiner Nayara Energy and other assets held as part of its mining portfolio.

In addition to trading synergies, the cash flows generated by the Group's industrial assets portfolio have been growing significantly and now contribute substantially to the Group's profitability, resulting in an additional source of profitability and further diversification.

Conservative risk management and strong governance standards

The Group has put in place and adheres to comprehensive and clear compliance and risk management procedures which are monitored on a daily basis.

Prudent risk management is integral to the Group's business model and has been entrenched since its foundation. Risk management is a central focus for the Group's Board of Directors (the "**Board of Directors**") and the Group's Management Committee (the "**Management Committee**") and a crucial consideration in the Group's overall trading strategy. The Group operates a policy of hedging all its physical positions for price risk. All trading positions are monitored on a daily basis through various metrics, including a VaR soft limit target of less than one per cent. of equity. Operational risk is proactively managed through comprehensive vetting and due diligence procedures, which are continuously reviewed and updated to reflect the evolving nature of the regulatory environment. For further information on the Group's risk management policies and procedures please refer to "*Risk Management*".

The Group also has strict compliance policies in place, operating an overarching code of business conduct, which enforces a zero tolerance approach to bribery and corruption, promotes honest and ethical conduct and serves as a guide for all employees on how to comply with laws and regulations and exercise good business judgement. The Group also operates a strict know your counterparty ("**KYC**") process necessitating the successful completion of credit and compliance checks before transacting with a new counterparty. For further information on corporate governance and compliance policies and procedures please refer to "*Management Structure and Corporate Governance*".

The Group's risk management framework is supported by its proprietary IT systems which record transactions from the point of trade capture through to accounting entries and provide maximum transparency and control by ensuring different levels of access and automatic dissemination of key information to all concerned parties.

The Group believes that its sound risk management policies have contributed to its positive performance through the volatile market environment over the last few years and helped to mitigate earnings volatility.

Strong leadership and ownership by management and key employees

The Group management team has substantial experience in the commodity sector and a proven track record in the development of the business. The Company's Board of Directors has significant experience both in the commodities sector and within the Group with an average of approximately 23 years' experience in the commodities sector. Since the foundation of the Group in 1993, the management team has overseen the consolidation and expansion of its trading activities across various commodity products and geographies. The Group is exclusively owned by its management and employees. This shareholding structure aligns individual aspirations with the long term interests of the Group. By virtue of having its own capital at risk, senior management is motivated to take a long term view on the Group's overall performance and to protect its capital.

Track record of sustainable profitable growth and financial strength

As a result of its position in the global commodity trading industry, its business model and diversified activities, the Group has been profitable every year since inception in 1993 and has significantly grown shareholders' equity, demonstrating strong performance and business model resilience, with net worth increasing year-on-year. The resilience of the Group's business model has been demonstrated by its steady growth and strong performance through various commodity cycles and periods of price volatility as well as during periods of economic, financial, and sovereign debt crises. The Group's EBITDA (Earnings before interest, taxes, Depreciation and Amortisation) increased at a 13.0 per cent. compound annual growth rate ("**CAGR**") over 2014-2019.

The Group believes that its robust and highly diversified funding model and access to liquidity have contributed to the Group's strong financial performance and flexibility. The Group has a three-pillar funding model based on short term transactional facilities, securitisation, and corporate credit facilities. As of 30 September 2019, the Group sourced funds from about 140 banks in various markets including Europe, Asia Pacific and the United States, providing it with significant diversification both in terms of funding sources and geographies thereby allowing the Group to expand whilst managing its liquidity position. Since December 2012, the Group has increased its available facilities by 61 per cent., from USD 38.2 billion to approximately USD 61.5 billion as of 31 March 2020.

The significant expansion of the Group's sources of financing over the years has been achieved on the basis of maintaining an acceptable and sustainable credit standing in the absence of a corporate rating.

Group Strategy

The Group does not speculate on price direction. The Company profits from optimising the supply chain to its customers and from exploiting natural, low risk, physical arbitrage opportunities. All physical positions are systematically hedged for index price risk and no outright price risk is taken other than through limited speculative positions which are subject to defined risk limits. Profit is generated from the volatility of supply/demand and the value generated by control and management of the supply chain.

Unlike the derivatives markets, where transactions (and arbitrage opportunities) are closed within seconds, physical arbitrage of this kind requires actual delivery of the physical commodity. As a result, value can only be extracted by having access to physical commodities and adequate logistical assets. Therefore, in order to generate and maximise arbitrage opportunities the Group's strategy is to grow volumes and optimise logistics operations in its markets.

Key Industrial Assets Providing Arbitrage Opportunities and Income Diversification

The key to creating arbitrage opportunities is through increasing trading volume by securing as many supply and offtake contracts as possible, as well as having the control of logistics tools (e.g. time charter, storage facilities, ports, etc.). The Group's investments, whether in the oil or the metals and minerals sector, are focused on opportunities that provide complementary volume flow to the trading business, open up new markets and create recurrent, sustainable income sources. In addition to the trading benefits, the cash flows generated by these investments have been growing significantly and they now contribute to the Group's profitability, resulting in an additional source of profitability and further diversification.

The Group's industrial assets have increased from USD 4,620 million as of 30 September 2012[5] to USD 9,079 million as of 30 September 2019 and to USD 8,031 million as of 31 March 2020. These fixed assets correspond to the Group's investment in Puma Energy Group, the Group's oil storage and distribution assets, of which the Group holds a legal beneficial interest of 49.98 per cent. in Puma Energy Group; Impala Terminals, the Group's metals and minerals warehousing division and logistics provider; Nyrstar, the world's third largest producer of zinc metal; the Group's oil storage and export terminals (e.g. fully owned Petromining terminal in Argentina); 24 per cent. owned Indian refiner Nayara Energy and other assets held as part of its mining portfolio, notably 50 per cent. ownership in MATSA (as defined below).

The Group has demonstrated its ability to divest fixed assets and recycle capital, allowing the Group to crystallise gains from its investments and generate substantial cash flows and profits (over USD 3 billion in aggregate over the years). It enables the Group to maintain discipline in capital expenditure, to share risk and to realise timely returns on its asset investments, while establishing a broader investment platform than would be possible on a stand-alone basis. Significant divestment included the full or partial sale of mining assets (Volcan, Anvil, Tiger and CMC); more than 50 per cent. of Puma Energy in 2013; the creation of an oil storage and export facility at Corpus Christi, Texas; the subsequent sale of a majority stake to Buckeye Partners L.P., with ongoing retention of commercial rights, in 2014, and the sale of the residual 20 per cent. stake in 2018; and the establishment of joint ventures with Mubadala to invest in the Porto Sudeste iron ore export facility in Brazil and the Minas Aguas Tenidas "**MATSA**" mine in Spain in 2015. In September 2018, the Group signed an agreement with IFM to create a 50:50 joint venture to operate Impala Terminal assets in Mexico, Spain, Peru, Paraguay, and the multimodal freight forwarding operation in Africa. A pre-tax profit contribution amounting to USD 191 million was realised from the sale of some of the infrastructure assets to a newly formed joint venture with IFM in the fiscal year 2018.

Ownership Model and Experienced Management Team whose Interests are Aligned to Long Term Growth Performance

The Group is owned exclusively by approximately 700 senior employees. This ownership model ensures focus on the long term success of business, promoting management depth and stability and managing risk. By virtue of having capital at risk, senior management is motivated to take a long-term view of the Group's overall performance and to protect its capital.

The Group has an experienced management team which has developed the expertise required to manage a commodities trading business over a number of years.

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[5] Equal to the total fixed assets of the Group disclosed in its FY2012 Annual Report.

Maintenance of Prudent Financial Profile

Prudent risk management is integral to the Group's business model and has been deeply rooted in the Company's business principles since its foundation. Guidelines are established at the senior management level and the credit and finance department retains a veto right on any transaction.

The Group maintains a diversified funding model, both in terms of the type of financing available and the geographic location of its banks. This broad funding base helps to increase the Group's access to liquidity and provides funding flexibility. The Group has demonstrated its ability through various market conditions to raise ample and appropriate types of financing to meet the business funding requirements and to tap various investor bases, maturities and geographies. The Group has successfully managed its liquidity positions throughout commodity, economic, financial and banking cycles and crises. The Group's strategy is to continue to focus on maintaining such a prudent financial policy and to sustain its liquidity buffer allowing it to be ready to capitalise on opportunities when they arise.

The Group manages its treasury and liquidity risks, maintaining a strong liquidity position through the following:

- Ensuring that a sufficient amount of immediately-available cash remains on hand in order to be prepared for a potential volatile period, and associated possible margin calls, or any urgent cash outflow. As of 30 September 2019 and as of 31 March 2020, the Group maintained USD 3.2 billion and USD 4.0 billion, respectively, of immediately available cash in liquidity funds;
- Maintaining bilateral lines which allow the Group to mark-to-market financings to the value of the underlying physical assets. Mark-to-market financing is performed weekly (or intra-weekly in the case of extreme volatility) and provides an additional source of liquidity which is not available to competitors which are financed purely from revolving credit facilities ("**RCF**");
- Committed unsecured credit facilities, with a focus on new sources of financing that lengthen the maturity profile of the Group's debt;
- Utilisation of bilateral trade finance lines for the first half of the fiscal year 2020 averaged about 56 per cent. Average utilisation of revolving credit facilities over the same period was approximately 50 per cent.;
- Advanced funding sublimit incorporated in the Asian RCF, allowing same-day drawing of funds (otherwise T+3); and
- Balanced distribution of profit (significant retained earnings) and subordination of repurchased equity.

Recent Financial Results for the financial years ended 30 September 2019 and 30 September 2018[6]

Profit and Loss

Revenue for the fiscal year ending September 2019 was USD 171.5 billion, a decrease of 5 per cent. from the figure of USD 180.7 billion recorded in 2018 even though the total traded volumes increased. This reflected lower average prices of many of the commodities traded by the Group compared to 2018. The total volume of commodities traded rose by 4 per cent. to 389 million tonnes from 371 million tonnes. Oil and petroleum products volume rose by 6 per cent. to 292 million tonnes, representing an average daily volume of 6.1 million barrels. Metals and minerals volume was just 1 per cent. higher at 97 million tonnes.

Gross profit in 2019 increased by 25 per cent. to USD 2,978 million from USD 2,384 million in 2018. This represented a gross profit margin of 1.7 per cent. compared to the margin of 1.3 per cent. registered in 2018, reflecting the strong performance of both Oil and Petroleum Products and Metals and Minerals trading divisions. In divisional terms, the gross profit figure reflected a 64 per cent. increase in gross profit in Oil and Petroleum products to USD 1,681 million and a 5 per cent. decrease in Metals and

[6] References to "2019" or "2018" in this section entitled "Recent Financial Results for the financial years ended 30 September 2019 and 30 September 2018" are to the financial year ended 30 September 2019 or 30 September 2018, respectively.

Minerals with gross profit at USD 1,297 million, slightly below the strong performance recorded in 2018. Oil and Petroleum Products benefited from heightened market volatility having repositioned the trading books to reflect the shift of market structure to backwardation (from contango). Further, this was the third consecutive year in which the gross profit in Metals and Minerals exceeded USD 1 billion, showing an exceptionally strong and steady performance by that division.

EBITDA for 2019 was USD 2,129 million, compared to USD 1,712 million for 2018, an increase of 24 per cent. from the previous year, continuing a strong run of EBITDA performance in recent years. From an operating profit perspective, the Group believes that EBITDA is the most appropriate measure to assess its operating performance. See further "*Key Performance Indicators*".

Results from operating activities were USD 1,649 million in 2019, an increase of 11 per cent. from USD 1,492 million recorded in 2018. General and administrative expenses rose to USD 1,157 million (which is equivalent to a 10 per cent. increase excluding the consolidation of Nyrstar) and is due primarily to the consolidation of Nyrstar and to an increase in compensation paid to the Group’s staff. Gross financing costs were 18 per cent. higher than in 2018 at USD 1.4 billion, driven by the sharp increase in USD Libor compared to 2018.

In 2019, the Group realised significant gains as a result of two transactions with ship owners, Frontline Ltd. and Scorpio Tankers Inc, selling 29 oil tankers through the sale of two subsidiaries and the exercise of purchase options embedded within the existing lease agreements, in exchange for equity in those companies, generating an exceptional gain of USD 201 million. However, this did not fully compensate for the impairments, value adjustments and write-offs relating to the continuing equity investment in Nyrstar and other investments, which totalled USD 315 million.

The Group delivered a healthy financial performance in 2019, with a profit for the year of USD 868 million, a decrease of 1 per cent. from the figure of USD 873 million recorded in 2018. This is a satisfactory result and in line with performance in each of the two previous years. The fact that it does not fully reflect the strong trading performance is due to financial impairments and write-offs related to some of the Group’s industrial assets and investments.

Assets and Liabilities

As at 30 September 2019, the Group’s total assets amounted to USD 54,151 million, largely unchanged from the figure of USD 53,801 million as at 30 September 2018, despite the full consolidation of Nyrstar. Fixed and non-current assets were 22 per cent. higher at USD 10,777 million, reflecting the inclusion of Nyrstar’s fixed assets in the balance sheet. Equity-accounted investees were valued at USD 3,417 million, compared to USD 3,361 million a year earlier: this reflects the net effect of additions, disposals, impairments, and income and losses from various investments. It includes, for instance, the reduction in the value of the Group’s stake in Puma Energy, from USD 1.95 billion as at 30 September 2018 to USD 1.75 billion as at 30 September 2019. Other non-current assets were USD 348 million as at 30 September 2019, significantly lower than the USD 1,095 million recorded as at 30 September 2018, leading to the recovery of cash collateral posted against hedges.

Current assets as at 30 September 2019 were slightly down by 3 per cent. from 30 September 2018 at USD 43,372 million, with inventories decreasing by 9 per cent. at USD 13,435 million, reflecting lower average commodity prices. In line with the Group’s risk management policies, all stock was either presold or hedged at all times throughout the year. Trade and other receivables as at 30 September 2019 were also lower by 7 per cent. at USD 18,517 million.

Group equity was USD 6,805 million as at 30 September 2019, up from USD 6,250 million as at 30 September 2018. It is the Group’s policy to continue to grow its equity base. Equity increased year on year by USD 555 million, which is mainly explained by the retained earnings and by the net proceeds from perpetual bonds. The Group redeemed its SGD 200 million perpetual bond at its first call date in February 2019 and on 31 July 2019, issued a EUR 262.5 million perpetual bond as part of the acquisition of the Nyrstar operating companies, valued at USD 267 million in the balance sheet as at 30 September 2019. Current liabilities, including short-term bank borrowings, as at 30 September 2019 were USD 37,379 million, down from USD 38,576 million as at 30 September 2018.

Cash Flow

Operating cash flow before working capital changes was USD 1,993 million in 2019, 20 per cent. up from the figure of USD 1,655 million in 2018. The Group believes its financial performance is best assessed on the basis of cash flow before working capital changes, since the level of working capital is predominantly driven by prevailing commodity prices and volume variations are financed under the Group's self-liquidating finance lines. This means that holding prices constant, an increase in volumes should lead to an increase in working capital outflow. Holding volumes constant, a decrease in price should lead to a working capital inflow. If the trend of price decline continues, a net working capital inflow can be anticipated which can be expected to be somewhat compensated by growth in volumes traded.

Working capital needs decreased with a significant year-on-year net working capital release of USD 3,153 million for 2019 compared to a USD 702 million requirement for 2018, leading to the equivalent repayment of working capital financing lines.

Investing activities resulted in a net cash use of USD 285 million in 2019, compared to a net use of USD 95 million in 2018, well within the USD 500 million limit targeted by the Group. The net cash used in financing activities was USD 3,074 million in 2019, compared to the USD 148 million generated in 2018, in line with the USD 3 billion release of working capital mentioned above. The overall balance of cash and cash equivalents as of 30 September 2019 was USD 6,267 million, an increase of USD 911 million from the figure of USD 5,356 million as of 30 September 2018.

Recent Financial Results for the half years ended 31 March 2020 and 31 March 2019[7]

Like-for-like comparisons between the first half of 2020 and previous periods are complicated by the fact that results incorporate for the first time the IFRS 16 reporting requirement on lease arrangements. Unless otherwise indicated, the first half of 2020 figures include the effect of IFRS 16. Moreover, Nyrstar was fully consolidated in the first half of 2020 and not in previous period.

Profit and Loss

Revenue for the first half of 2020 was slightly down at USD 83.0 billion compared to USD 86.3 billion recorded in the first half of 2019, reflecting lower average commodity prices over the period. Yet, the Group recorded a healthy net profit of USD 542 million in the first half of 2020, an increase of 27 per cent. from the figure of USD 426 million in the first half of 2019, led by an exceptionally strong performance in physical oil trading in the volatile markets that characterised the period.

Both core trading divisions performed well. Metals and Minerals division maintained a robust profitability, trading higher volumes in refined metals and bulk minerals, while Oil and Petroleum Products turned in its strongest first-half profit performance on record, in the context of significant volatility and dislocations in the global market for crude oil and refined products. Noting that, in the October-December 2019 quarter, political events in the Middle East and the US-China trade conflict had already created heightened volatility in oil and other commodity markets. Then in March 2020, the shock to global oil demand resulting from the Covid-19 pandemic, combined with a jump in supply (caused by price wars between major producing countries), drove prices sharply down. During this period, the company maintained a strong financial position, enabling us to provide vital services to the market in the face of geopolitical turbulence and the Covid-19 crisis.

In the first half of 2020 and the financial year 2019, the Group traded on average approximately 5.9 mbpd and 6.1 mbpd, a slight increase from the 5.8 mbpd in the financial year 2018, confirming a plateau in oil traded volumes around 6.0 mbpd. Total volume of metals and minerals traded increased by 6 per cent. to 49.0 million tonnes in the first half of 2020 as compared to the first half of 2019. Gross profit for the first half of 2020 was USD 3,126 million, a sharp increase of 112 per cent. from the USD 1,472 million recorded in the first half of 2019. This increase of the gross profit in the first half of 2020 includes the effects of the consolidation of Nyrstar (USD 370 million) and the IFRS 16 implementation which led to lower cost of sales (USD 481 million). In divisional terms, the gross profit figure for the first half of 2020 reflected a 106 per cent. increase in gross profit in Oil and Petroleum Products from USD 1,035 million in

[7] References in this section “Recent Financial Results for the half years ended 31 March 2020 and 31 March 2019” to first half of 2020 or first half of 2019 are to the six months ended 30 March 2020 or six months ended 31 March 2019, respectively.

the first half of 2019 to USD 2,128 million in the first half of 2020, and a 129 per cent. increase in gross profit in Metals and Minerals from USD 437 million in the first half of 2019 to USD 998 million in the first half of 2020. This translates into a record gross margin level at 3.8 per cent., up from 1.7 per cent. in the first half of 2019.

EBITDA was a record USD 2,411 million (USD 1,926 million excluding the impact of IFRS 16), an increase of 117 per cent. compared to USD 1,112 million in the first half of 2019, continuing a strong run of EBITDA performance in recent years.

Results from operating activities were USD 1,275 million in the first half of 2020, an increase of c. 43 per cent. from USD 894 million recorded in the first half of 2019. General and administrative expenses were at USD 1,453 million in the first half of 2020, significantly up from USD 510 million in the first half of 2019, an increase largely resulting from the first time application of IFRS 16 (USD 450 million) and the consolidation of Nyrstar (USD 404 million, mostly related to staff and depreciation costs).

The Statement of Income shows a loss of USD 398 million under "other income/expenses", compared to USD 68 million in the first half of 2019, which includes Nayara Energy impairments of USD 287 million and foreign exchange losses equating to USD 69 million. Net financing costs increased to USD 432 million from USD 316 million, largely because of the effect of IFRS 16 (USD 56 million) and Nyrstar (USD 57 million). Share of profit/loss of equity-accounted investees includes USD 150 million losses relating to the Group's investment in Puma Energy.

Assets and Liabilities

As at 31 March 2020, the Group's total assets stood at USD 54,416 million compared to USD 54,151 million on 30 September 2019. Fixed and non-current assets were USD 12,528 million as at 31 March 2020 compared to USD 10,777 million as at 31 March 2019. The difference was largely accounted for by the effect under IFRS 16 of booking leasing arrangements as "right of use" assets (USD 2,545 million). For the same reason, non-current liabilities rose to USD 11,802 million as at 31 March 2020 from USD 9,968 million as at 30 September 2019. Current assets fell slightly to USD 41,886 million as at 31 March 2020 from USD 43,372 million as at 31 March 2019, principally reflecting a shrinkage in inventories (to USD 11,550 million from USD 13,435 million) and receivables due to lower commodity prices.

Total Group equity grew by USD 173 million to USD 6,977 million as at March 2020, lower than the USD 542 million profit for the first half of 2020 mainly due to losses recorded in other comprehensive income related to associates (USD 208 million representing the Group's share of their other comprehensive income) and negative fair value movements on cash flow hedges (USD 199 million), mostly relating to hedging of price exposure on future purchases and sales of commodities.

Current liabilities, including short-term bank borrowings, at 31 March 2020 were USD 35,637 million, slightly down from USD 37,379 million at 30 September 2019.

Cash Flow

After adjusting profit before tax for non-cash items, the operating cash flow before working capital changes for the first half of 2020 rose to USD 2,345 million, including the IFRS 16 impact of USD 495 million. On a like-for-like basis, excluding the impact of IFRS 16, the total was USD 1,850 million, compared to USD 1,079 million in the first half of 2019. The Group believes its financial performance is best assessed on the basis of operating cash flow before working capital changes, as the level of working capital is primarily determined by prevailing commodity prices and price variations are financed through the Group's self-liquidating finance lines. Working capital needs reduced year-on-year with a net working capital requirement of USD 769 million in the first half of 2020, compared to USD 1,778 million in the first half of 2019. Cash flow from operating activities after working capital changes was a net inflow of USD 1,036 million in the first half of 2020, including the USD 439 million impact of IFRS 16, compared to a net outflow of USD 1,135 million in the first half of 2019.

Investing activities showed a net outflow of USD 171 million in the first half of 2020 (the first half of 2019: net outflow of USD 5 million), including USD 153 million of net investments in property, plant and equipment, of which USD 96 million is related to sustaining capital expenditure of the Nyrstar industrial facilities. The net outflow was well below the run-rate for the annual threshold of USD 500 million Capex (net of divestments) set by the Group back in the financial year 2017. Financing activities

showed a net outflow in the first half of 2020 of USD 415 million, mostly due to IFRS 16 negative impact of USD 439 million. Thanks to the solid operating cash flow generation and this limited amount of investments, Operating FCF (defined as operating cashflow before working capital changes, minus net interest paid, tax and net cash used in investing activities) for the period was USD 1,634 million – including the impact of IFRS 16 amounting to +USD 439 million.

The overall balance of cash and cash equivalents as of 31 March 2020 was USD 6,717 million, including USD 4.0 billion of immediately (same day) available cash in liquidity funds.

Operating Free Cash Flow ("Operating FCF")

The Group's funding model is structurally designed to absorb significant working capital requirements, as demonstrated over time. Therefore, the Group's underlying financial performance and leverage position is better assessed on the basis of Operating FCF generation, which is defined as operating cashflow before working capital changes, minus net interest paid, tax and net cash used in investing activities.

To understand the Group's underlying cash flow generation, one should focus on the Operating FCF generation. Movements in underlying commodity prices, alongside changes in volume, can cause significant swings in cash flow generated by changes in working capital. These drivers have little impact on underlying performance, given price risk is systematically hedged. Short-term financing is used to finance outflows where required and these items therefore largely net off from a cash flow perspective.

Following a phase of strategic investment in industrial assets, peaking in 2013, the Group has generated over USD 5 billion of Operating FCF since the financial year 2016. This reflects the Group's consistent cash flow generation in conjunction with an updated investment approach, i.e. reduction in annual Capex spend, often including partners when directly making new investments and disposal of non-core assets. It is also worth noting that Operating FCF has also more than covered the Company's share buybacks over the years, which further demonstrates the Group's commitment to a conservative capital structure, increasing the Group's equity from USD 5.8 billion as at 30 September 2016 to USD 7.0 billion as at 31 March 2020.

Adjusted Debt to Group Equity Ratio

As a physical trading group, the Group relies on a specific funding model. Therefore, a number of adjustments should be made to better gauge the financial leverage of a physical commodities trading company:

- Pre-sold or hedged stock should be deducted from debt (including purchased and pre-paid inventories being released). This reflects the great liquidity of the stock and the ease at which this could be converted to cash. As previously described, the Group's policy is to have 100 per cent. of stock hedged at all times;
- Cash and short-term deposits should be deducted from debt;
- Non-recourse invoice discounting or portion of loans (for example non-recourse portions of bank financings used to extend prepayments to counterparties) should be deducted; and
- The Trade Receivables Securitisation Programme should be taken out on the basis it is an entirely distinct legal entity from the Group, with no recourse to the Group, and is only consolidated into the financial statements in accordance with the Group's accounting rules.

The ratio of adjusted debt to Group equity stood at 1.04x as of 31 March 2020, compared to 0.78x as of 30 September 2019. The increase in the ratio was mostly due to an increase in adjusted debt, only partly offset by the limited increase in Group equity. Indeed, adjusted debt increased by c. USD 1.9 billion, was primarily driven by:

- USD 867 million reduction in receivables securitisation (due to low commodities prices while keeping stringent eligibility criteria under the programme) and non-recourse debt; and
- USD 1.9 billion increase in the difference of 'trade receivables in excess of trade payables', typically compensated by short term debt;

partly offset by a strong cash generation with USD 1,195 million of Operating Free Cash Flow over the first half of 2020 (excluding IFRS 16 impact).

The nature of this ratio means it fluctuates over time, as it is highly correlated to commodities prices. However, the Group is committed to maintaining a disciplined approach to leverage and it is already seeing the results of the stated plan to reduce Capex and in turn, leverage. The Group will continue to manage the business in order to ensure that this ratio does not stay significantly above 1.0x for a sustained period.

Corporate Debt to EBITDA Ratio

As mentioned above, there are some limitations to using the Adjusted Debt metric principally as it does not fully account for the Group's approach to working capital financing and therefore remains correlated to moves in commodity prices and traded volumes.

Over time, the Group has reviewed the adequacy of the adjusted debt concept and introduced a leverage ratio referred to as the corporate debt to EBITDA ratio in 2015. The Group believes this is a more relevant ratio for senior unsecured creditors than the typical adjusted debt to Group equity ratio.

In particular, the adjusted debt to Group equity ratio does not take into account the excess of trade receivables over trade payables, which would be available to senior creditors in the case of a liquidation. Commodity receivables typically have a short duration (of 1 to 3 months) and very low default rate due to the strategic nature of the goods. By removing the trade receivables in excess of trade payables, the corporate debt excludes any working-capital debts which are repaid through resale of the commodity (self-liquidating debts), and rather focuses on debt which is repaid by cash flow generation (which EBITDA provides a proxy for).

The corporate debt considers all debt, whether short-term or long-term, and removes:

- Cash and short-term deposits;
- Pre-sold or hedged stock (including purchased and pre-paid inventories being released);
- Trade receivables in excess of trade payables (including derivatives); and
- Any corporate debt for which lenders do not have recourse to the Group (e.g. non-recourse portion of bank financings used to extend prepayments to counterparties).

Noting that, in this case, the Trade Receivables Securitisation Programme does not need to be deducted separately since the excess trade receivables would capture it. Likewise, non-recourse debt relating to invoice discounting is not considered, avoiding double counting (as receivables in excess of payables are already deducted).

The increase in corporate debt until the end of the financial year 2016 was related to the end of the intensive cycle of investment in industrial and logistical assets that the Company had started in 2012. Following the decision in 2017 to limit total annual Capex (net of divestments) to USD 500 million for the years to come, and thanks to a strong Operating FCF generation in 2016-17, corporate debt level significantly decreased as of the end of the financial year 2017. The increase of c. USD 1.2 billion in corporate debt during 2018 was mainly related to an increase in long term loans and borrowings, as a result of a USD 500 million perpetual bond repayment and significant collateral posting in relation to long term LNG and US Crude hedges. Further, the increase of c. USD 450 million in corporate debt during 2019 was primarily driven by higher prepayments and the repayment of the SGD 200 million perpetual bond.

As of 31 March 2020, corporate debt stood at around USD 4.3 billion, compared to USD 5.3 billion as of 30 September 2019. This decrease in corporate debt was accompanied by a record EBITDA generation, with a 38 per cent. increase in EBITDA (last 12 months, excluding the impact of IFRS 16) over the last six months, resulting in drop of corporate debt to EBITDA ratio to 1.5x as of 31 March 2020, a level consistent with an investment grade profile – while the company keeps its long term target in the range of 2.0x to 3.0x.

Description of the Group

History of the Group

The Group was established in 1993 as a private group of companies owned by its core founding shareholders, and today remains exclusively owned by its management and key senior employees. It has

transformed from a niche trader into a worldwide player, one of the few independent global trading houses. At its creation, the Group started by focusing on three markets in which it had extensive expertise: oil and minerals in South America, metals in Eastern Europe and oil in Africa. The Group rapidly expanded its activities geographically through internal growth, marginal acquisitions and strategic alliances to create a globally diversified company.

The Group has been profitable every year since inception in 1993. The Group has performed strongly throughout various commodity cycles and periods of high price volatility as well as during the economic, banking and financial crisis, with all key metrics improving.

Today, the Group operates in the market space previously dominated by the major producers which in recent years have increasingly focused on upstream exploration and production and reduced their involvement in distribution. As a consequence of these changes, only a handful of global players remain (including the Group), providing the Group with significant scope for growth in its core commodity activities. Since the Group is exclusively owned by its management and employees, it is therefore focused on the long term success of the business, promoting management depth and stability, and encouraging prudent risk management.

Business Model Principles

The Group pursues a low risk physical arbitrage model, purchasing and delivering products to customer specifications. The Group systematically hedges all index price exposure related to its physical business and consequently movements in the index price do not impact profitability. The Group is a commodity logistics company, which works with real commodities for real industrial clients and whose paper trading activities relate predominantly to the hedging of its physical business and not to speculative trading.

The Group profits from optimising the supply chain of its customers and exploiting natural, low risk, physical arbitrage opportunities in the marketplace. The Group’s principal activity involves the “slow pace, high touch” distribution and logistics of physical commodities, purchasing commodities as principal and supplying them to customers at the right time, the right location and with the right specifications as well as managing all aspects related to the trade flows including logistics, price and counterparty risk management and financing. Profit is, therefore, generated from the volatility of supply and demand, and the value generated through the control and management of the supply chain.

The Group's business model is built on four pillars:

- Non speculative arbitrage based model whereby the embedded price risk in the physical flows is systematically hedged;
- Strong risk management philosophy which has been institutionalised since the Group's foundation.
- Diversification in terms of product range, geography and clients which balances revenues and absorbs volatility in cycles; and
- Private ownership structure which promotes management depth and stability and ensures business continuity as employee shareholders' long term interest is fully aligned with the sustained performance of the Group.

Physical Arbitrage Based Model

Unlike the derivatives markets where transactions (and arbitrage opportunities) are closed within seconds, capitalising on physical arbitrage opportunities requires delivery of the commodity over time and therefore value can only be extracted by those who have access to physical commodities and an extensive logistics network. While increased market volatility can generate a larger number of opportunities, the Group remains profitable during periods of lower volatility due to its global presence and diversification of geographical markets, customers and products.

Arbitrage opportunities exist in several forms and can be related to geography, product specs, timing and optionality of contract.

Geographical Arbitrage

The Group’s global reach means it sources and sells products in every region of the world. The combination of the expertise of its traders and knowledge of the global freight markets allows it to constantly optimise the geographical location of its supply and demand, so reducing logistical costs. This allows the Group to provide products to its customers quickly and at a competitive price, emphasising the effectiveness of its business model.

Technical Arbitrage

Due to the Group’s extensive logistics and storage networks, the Group is able to blend products in order to meet individual customer’s specifications. This allows the Group the flexibility to offer tailor-made products to its customers and obtain on-specification products at the lowest possible cost. The Group is able to capitalise on such opportunities by virtue of its deep understanding of both market requirements for specific products and its technical comprehension and ability to blend products to required specifications.

Time Arbitrage

The Group’s cost efficient storage network affords the opportunity to take advantage of changes in market conditions over a period of time. In a contango market, where forward prices are higher than current spot prices, the Group is able to buy and place cargoes in storage whilst selling the equivalent forward contract. As long as the cost of the transaction, which includes storage, insurance and financing, does not exceed the price differential between the forward and spot rates, the Group is able to lock in profit with very little risk.

Importantly, the Group can benefit from such arbitrages in a variety of ways by combining geographical, technical and time arbitrages according to each specific market opportunity. The Group’s strength lies in being able to resort to its extensive logistics and warehousing network, the Group’s experience with blending material to customers’ required specifications and the Group’s strong local network that provides a key advantage in accessing first-hand market intelligence.

Contractual Arbitrage

Contractual arbitrage is linked to pricing options provided in the contract between the Group and the buying or selling party in a transaction. For some customers, the Group can choose the pricing period for a given contract. This can include, for example, pricing based on an average price of the month before or after the loading of a cargo. Such flexibility in pricing provides an extra level of optionality.

Company Structure

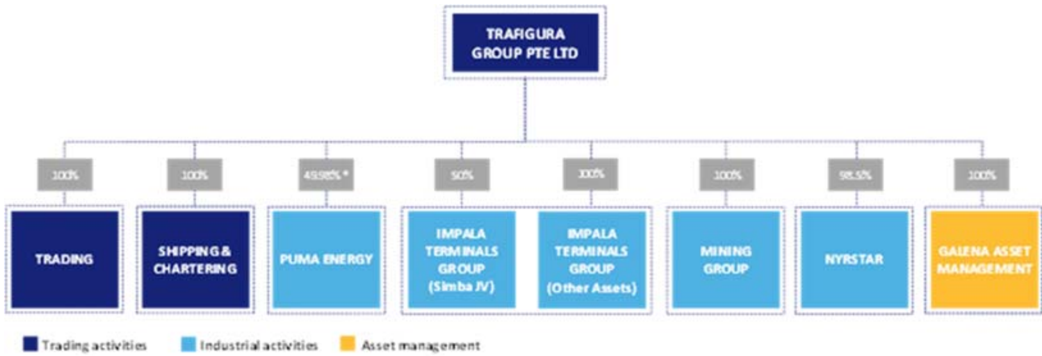
The Group's parent company, TGPL, is a company incorporated under the laws of Singapore.

The Group is composed of a number of trading companies and industrial asset based businesses related to its core trading activities. TPTE, incorporated in Singapore, is the entity through which the majority of the Group's physical trades are booked, with US trading booked through its US-domiciled entity TTL (as defined below), a company incorporated under the laws of Delaware. In addition, the Group directly or indirectly owns stakes in different assets (including oil storage, metals warehousing and mining assets) that allow the Group to improve logistics, increase volumes, reduce costs or add a new revenue generating activity to its trading portfolio.

At the end of the Group's fiscal year 2015 (30 September) the Group's incumbent reference parent entity, TBBV, was converted into a holding company and another existing Singaporean entity, TGPL, became the reference parent entity and the consolidating entity for the Group. The reorganisation was an important step in creating greater consistency across the Group's structure. The decision to make Singapore the domicile of the main trading entity was commercially driven and reflects the Group's commitment to the strategically important and rapidly growing Asian market.

A simplified summary chart of the Group structure is provided below:

THE GROUP'S CORPORATE STRUCTURE



(*) The Group's legal beneficial interest – post the shareholding restructuring transaction, involving Cochan Holdings, completed in June 2020

Source: Company

The Group trades globally, so to consider the trading volumes and related financial statements of individual regionally focused subsidiaries is less important because these depend on the structure of the global market itself and as such, the Group believes it is best considered as a consolidated entity. For example, the financial statements of TTL will depend on the oil market demand and arbitrage opportunities available in the United States. As a result, the profitability and cash flow generation of individual subsidiaries can vary considerably year on year.

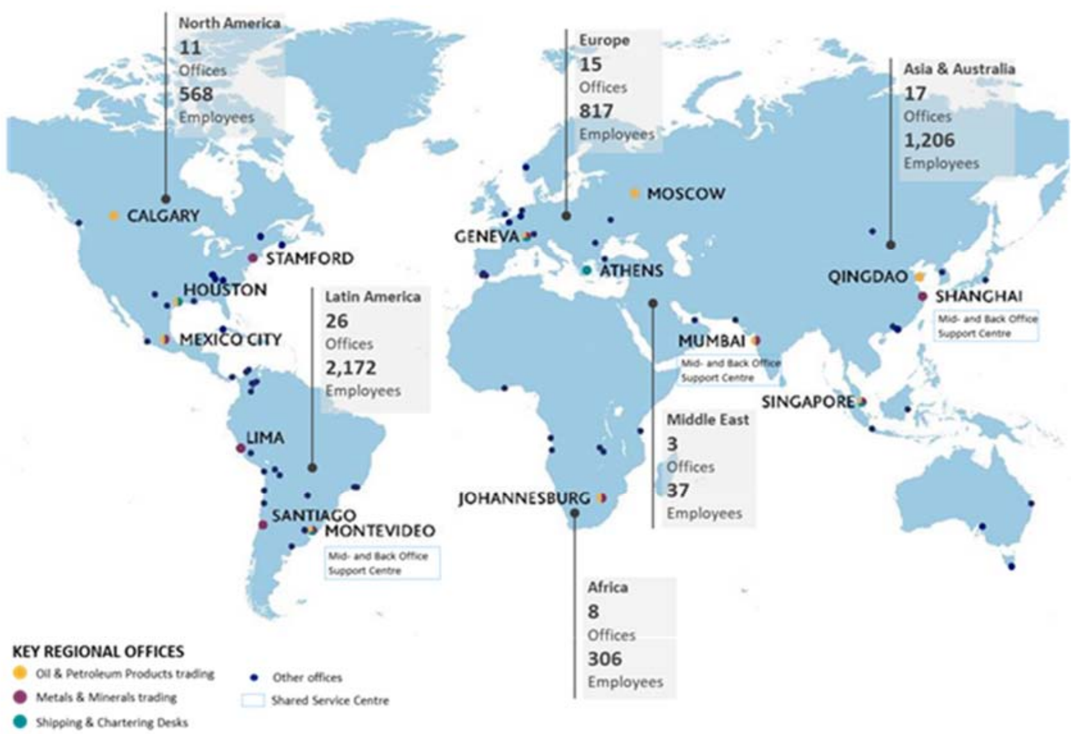
Within the consolidated Group, the principal entities are as follows:

Trafigura Group Pte. Ltd. ("TGPL")	• Corporate head office • Parent company and consolidating entity for the Group (effective from 30 September 2015)
Trafigura Funding S.A. ("TFSA" and the "Issuer")	• Wholly owned indirect subsidiary of TGPL • Engaged in capital market transactions and private placements for the Group
Trafigura Pte. Ltd ("TPTE")	• Wholly owned indirect subsidiary of TGPL • Engaged in buying and selling commodities (TPTE is the Group's main trading company), operating through key offices in Singapore and Geneva (Switzerland). • Booking centre for all derivative transactions within the Group.
Trafigura Trading LLC ("TTL")	• Wholly-owned indirect subsidiary of TGPL • Engaged in buying and selling commodities • Responsible for conducting trading business in the U.S.
Trafigura Investment China Co Ltd. ("TIC")	• Wholly-owned indirect subsidiary of TGPL • Engaged in buying and selling commodities • Responsible for conducting trading business in China
IWL Holding B.V. ("Impala Terminals Group"")	• Wholly-owned indirect subsidiary of TGPL • Consolidates the bulk-commodity warehousing and logistics activities which do not fall under the joint

	venture agreement with IFM investors (the 'Simba' JV)
Urion Holdings (Malta) Ltd. ("Mining Group")	• Wholly-owned subsidiary of TGPL • Manages the Group's mining related investments
Nyrstar Holdings Plc (Malta) ("Nyrstar")	• Wholly-owned indirect subsidiary of TGPL • Holding of the Group's 98 per cent. ownership in the operating business of Nyrstar

The Group also holds a legal beneficial interest of 49.98 per cent. in Puma Energy Holdings Pte. Ltd., a leading midstream and downstream oil company, and 50 per cent. interest in Impala Terminals Group S.à R.L., the joint venture with IFM investors, which owns and operates Impala Terminals assets in Mexico, Spain, Peru and Paraguay, together with a global freight forwarding operation.

KEY HUBS



Office Network

As at 30 September 2019, the Group's network of 80 offices, located in 41 countries, employs local marketing representatives who are the main day-to-day contacts with the customers in their given regions. This network provides the main traders with "hands-on" market knowledge (trading conditions and characteristics) and valuable contacts in every jurisdiction. Relationships with suppliers and customers are also enhanced by this close proximity generating significant benefits for the Group's sourcing and distribution capabilities. These field offices and agencies liaise directly with the main offices and trade under the supervision of the main trading centres, although all contracts are executed centrally. They report regularly to the entire Group as well as on an ad-hoc basis. This method of organisation allows for a combination of access to high expertise and flexibility so that the Group can benefit from market opportunities while efficiently controlling risk.

Finance, liquidity management, risk management and legal functions are centralised in Geneva with local representatives in the main trading offices. This centralisation enables the Group to have strict control over its financial position and its risk exposure.

Business Operations

Oil and Petroleum Products

The Group's petroleum-related trading activities are conducted through its key regional offices in Beijing, Calgary, Geneva, Houston, Montevideo, Moscow, Mumbai and Singapore.

Revenue generated by the oil and petroleum products business (including industrial activities) makes up the majority of Group turnover. The division reported revenue of USD 111.3 billion (65 per cent. of total revenue) in the financial year 2019, a decrease of 10 per cent. over the previous year. Oil and petroleum products volume rose by 6 per cent. year on year to 292 million tonnes – an average daily volume of 6.1 million barrels. The division performed strongly over the financial year 2019, benefiting from heightened market volatility and having repositioned the trading books to reflect the shift of market structure to backwardation from contango back in the financial year 2018. Indeed, at the time, a timely and radical restructuring of the trading book enabled a material improvement in profitability during the second half of the year, which continued during the financial year 2019. Gross profit from oil and petroleum trading rose by 64 per cent. to USD 1,681 million from USD 1,022 million in the financial year 2018.

The Group is primarily active in physical oil trading including transportation by vessel, pipeline or railcar and is correspondingly active in the futures, swaps, and options markets, predominantly for physical hedging purposes.

The Group trades crude and refined products with a diverse customer base including electricity distribution utilities, oil refiners, distributors and state monopolies. Clients include BP, Exxon Mobil, Royal Dutch Shell and Total amongst others, while key suppliers include names such as Rosneft, SK Energy or Total amongst others.

About a third of the volumes traded are on one year contracts or more, with the rest on shorter term contracts or on a spot basis. In this market, however, it is important to note that due to control over the logistical chain and assets, spot purchases/sales are often recurring and can be viewed as stable long-term positions. Therefore, while these contracts are short-term and on a revolving basis, they can be thought of as de-facto recurring. This structure provides the Group with a flexible trading portfolio with a near term maturity bias, while simultaneously avoiding sole dependency on spot trades or risk associated with long-term maturities.

Many of these trading relationships are further cemented by the giving and receiving of credit lines. These significant relationships all span in excess of a decade and represent a cross section of business activities ranging from spot and term business in different product lines. The Group's top ten clients (excluding affiliated companies such as Puma Energy) in the oil division made up c. 27 per cent. of overall oil revenue in the financial year 2019 (financial year 2018: 23 per cent.). No single external customer accounted for more than 4 per cent. of overall oil and petroleum products turnover.

The Group's oil volumes have increased significantly and consistently in recent years along with its corresponding market share. In the financial year 2019 and the financial year 2018, the Group traded on average c. 6.1 million barrels per day (**"mbpd"**) and c. 5.8 mbpd respectively, a strong increase from the 5.3 mbpd of physical oil traded in the financial year 2017 and 4.3 mbpd in the financial year 2016. The Group estimates its current oil volumes amount to circa 3-5 per cent. of the world oil market or around 7-10 per cent. of the 'tradable market'[8].

After four years of rapid volume growth, the Group is in a phase of consolidation across its trading book. In the first six months of the fiscal year 2020, the Group traded on average approximately 5.9 mbpd, confirming a plateau in oil traded volumes around 6.0 mbpd.

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8 Defined as volumes which are not distributed by producers directly to consumers.

The Group estimates that it trades the second largest volume in oil and petroleum products for an independent trading company after Vitol Group of Companies ("**Vitol**"). The entire market remains very fragmented with no company representing more than 10 per cent. of total physical trading market volume.

Metals and Minerals

Centralised in Geneva, Switzerland, the Group's non-ferrous metals activities comprise 4 main trading books including copper, lead and zinc, alumina and aluminium, and nickel and cobalt. Post-restructuring in 2019, the division formally integrated the concentrates and refined books for each product – noting that the Group also trades silver as a by-products. The company's minerals activities include the iron ore and coal trading books. Similar to the oil business, no price-risk is taken on the physical business and the hedging of the index price on physical trades occurs through Trafigura Pte. Ltd., which acts as an internal broker. Apart from Geneva, other key trading offices for the metals and minerals commodities business include Johannesburg, Houston, Lima, Mexico City, Montevideo, Mumbai, Shanghai and Singapore.

Revenue generated by the metals and minerals trading division and related industrial activities represented 35 per cent. of total turnover in the financial year 2019. The division reported revenue of USD 59.1 billion, an increase of 6 per cent. over previous year. After years of growth, the profitability generated by the metals and minerals division has plateaued in the financial year 2019, with a reported gross profit of USD 1,297 million, slightly down from USD 1,362 million in the financial year 2018.

Metals and minerals are traded with a diversified client base ranging from mining and integrated mining companies to smelters and refined metals retailers. Major clients include Tongling Nonferrous Metals Group, Aurubis Group, China-Base Ningbo, amongst others.

Similar to previous years, the relationship with Nyrstar, third largest zinc smelting companies, in which the Group used to hold a 24.4 per cent. share, helped to boost the Group's presence in the European refined zinc metal market. Over the years, the Group developed its commercial relationship with Nyrstar through financing and agreements to offtake refined metals and to supply its smelters with concentrates. However, in July 2019, the Group became 98 per cent. owner of the operating business of Nyrstar, following a financial restructuring agreement with the company's creditors and bondholders, triggered by the inappropriate capital structure of the company (with an unsustainable debt load). Over the first half of 2020, Nyrstar made a positive contribution to the Group's gross profit and EBITDA for the first time, showing the benefits of the turnaround plan being implemented since its consolidation.

The importance of Asian metals consumption, driven by significant smelting and refining capacity in China and India can be seen in the Group's metals and minerals revenue breakdown. Indeed, the proportion of the Group's revenue generated in Asia is a reflection of the global market rather than the build-up of a niche trading geography. The Group's bulk-commodity revenue remains very diverse on a customer-basis.

Approximately half of the Group's refined metals contracts are on a one-year basis, with contracts typically agreed around October or November for the coming year. Other contracts are traded on a spot basis. In the concentrates business around half of contracts are annual or multi-year including evergreen (i.e. indefinite) with negotiated pricing for up to three years ahead. Again, other contracts are traded on a spot basis.

In the financial year 2019, the Group's top ten clients in the metals business made up approximately 14 per cent. of overall turnover (financial year 2018: 12 per cent.) and are listed below. No one customer accounted for more than 4 per cent. of overall metals and minerals turnover.

Despite challenging market conditions, the Metals and Minerals division had a robust year, slightly growing volumes and retaining profitability comparable to that of 2018. The Group traded 97.2 million metric tons ("**MMT**") of metal concentrates, refined metals, iron ore and coal during the financial year 2019, compared to 95.9 MMT in the financial year 2018. The division's contribution to gross profit decreased by 5 per cent. to USD 1,297 million, from USD 1,362 million in the financial year 2018.

Regarding non-ferrous concentrates and refined metals, the commodities showing the sharpest moves were zinc and lead concentrates, nickel and cobalt concentrates and copper metal in the financial year 2019. The three main factors that shaped the non-ferrous concentrates and refined metals markets in 2018 continued to do so throughout 2019: global trade tensions, tighter Chinese environmental regulations and

low supply. Current trade tension – most notably between the US and China – coupled with the continued slowdown of the Chinese economy, created a stagnation of global trade, substantially reducing metals consumption and negatively impacting base metal prices. Secondly, China's sustained emphasis on improving environmental conditions continued to curb production at the country's mines and smelters over the year. Thirdly, a combination of under investment, weather-related disruptions and changing government policy meant that percentage growth in mine supply on a year-on-year basis was in the low single digits.

In bulk minerals, the iron ore business had another strong year in 2019. Iron ore traded volumes increased by 6 per cent. in the financial year 2019 to 17.9 million tonnes from 16.9 million tonnes in the financial year 2018, developing new outlets in Europe for supplies from the Porto Sudeste facility in Brazil, further expanding the Group's domestic spot business out of Chinese ports, and continued development of flows from sources outside of Brazil – including Australia, South Africa, India, Mauritania and Mexico. On the other hand, the coal market was faced with a number of ongoing challenges. Traded volume slightly fell, by 2 per cent., to 59.4 million tonnes, as switching from coal to gas in power generation, combined with a mild winter and less hot summer, led to a significant supply overhang, resulting into a collapse of prices.

During the first half of 2020, the Group traded 10.0 million tonnes of refined metals and 39.0 million tonnes of coal and iron ore, to be compared with 9.6 million tonnes and 36.6 million tonnes respectively in the first six months of 2019.

In the metals and minerals sector, similarly to the energy sector, market share statistics are not freely available. Based on market knowledge, the Group estimates that its share of the freely traded market for copper, lead and zinc metal roughly represents 20 to 25 per cent. and even more in the copper, zinc and lead concentrates market.

The Group considers that in the metals and minerals sector it ranks as the second largest independent trader behind Glencore, with Glencore largely acting as a marketer of its own captive production. The Group is active in all main producing areas such as South and Central America, the Far East and Eastern Europe and sells worldwide to industrial customers.

Power & Renewables Trading Division

In October 2019, the Group established a new Power and Renewables Division with the following objectives and activities:

- Establish a Power trading platform, focusing initially on key derivative contracts, primarily in European and US markets, with a view to then consider other regions where the Group believes trading opportunities will arise. This activity complements growth in physical transactions as demand develops for merchant and intermediary services in electricity markets;
- Secure sourcing of power through investments in different types of electricity generation across the world; and
- Grow the Group's investments in renewable energy generation, with plans to build at least a 2-gigawatt portfolio over the next five to seven years.

Investing in renewable energy

In order to support this project, the Group's investment subsidiary, Galena Asset Management, is launching a Renewables Fund to allow the Group and selected third-party investors to invest through the fund into promising renewable projects, including solar photovoltaic, onshore wind, and energy storage, sourced both from the Group's extensive network of industrial assets as well as external projects. This fund, when launched, will have immediate access to 350 megawatts of renewable energy projects already in the pipeline.

As part of this development plan, in January 2020, the Group invested into a new 50-megawatt solar photovoltaic farm project in Mali, through the part-ownership of renewable energy developer Pan-African Soleil Holdings (PASH Global). Construction should be completed in 2020, and the project will become the largest solar farm in West Africa and one of the largest in the Sub-Saharan Africa. The solar PV farm project is intended to generate social benefits including creating local and sustainable jobs in Mali. At full capacity, it is planned to provide over 91,700 households in Mali with green electricity and save nearly 52,000 metric tonnes of carbon emissions each year.

Development is also underway for large-scale installations of photovoltaic panels at energy-intensive users among the Group's investments and owned assets, including mines and logistics terminals. Metal processing is one of the most energy-intensive of all industrial activities. The Group's zinc and lead smelting operation Nyrstar is investing in large-scale batteries and renewable energy generation at its global network of plants. It is developing over 100-megawatts of sustainable energy for its own operations, with surplus power to be sold back to the grid, assisting in the expansion of its trading business.

Investing in disruptive renewable technologies and energy storage

The Group has created a venture capital-type fund to invest in a number of early-stage disruptive renewable technologies including hydrogen power and alternative fuels, renewable energy storage technologies and carbon utilisation. The Group will support these companies by leveraging its expertise and global network, all in an effort to bring their technologies to market at scale and help accelerate the energy transition.

More specifically, efficient energy storage has a critical role in the low carbon economy. Effective storage systems are essential in integrating intermittent renewable energy into grids by aligning peaks and troughs in power generation with changing patterns of demand. The Group's strategic investment in Quidnet Energy, a clean energy business, is helping to deliver a cost-effective alternative to hydro-pump storage, the only existing long-duration storage solution at the moment. Quidnet's geomechanical pumped storage (GPS) system is based on hydro-power principles. It pumps water underground to be stored in rock formations at high pressure. At times of high demand this is released to the surface, where it powers electricity turbines.

Strategic stakes in the hydrogen sector

Hydrogen, especially green hydrogen, which is produced from renewable energy sources, has significant potential to accelerate the energy transition as the world moves towards lower-carbon economies. Its greater energy density-to-weight ratio makes it more suitable for higher energy industrial uses than the lithium-ion based technologies that feature in many of today's electric vehicles. Hydrogen fuel-cell powered electric engines also benefit from higher efficiencies than internal combustion engines and the market for this type of technology has grown substantially in recent years. In addition, the Group sees potential applications for hydrogen in running off-grid mines and producing chemicals.

As a result, in December 2019, the Group has taken an equity stake in start-up Hy2gen. The German-based company brings together specialists with experience of developing, building and operating plants for the production of green hydrogen and hydrogen-based e-fuels, offering better ways to achieve CO2-free or CO2 neutral fuels and storage solutions. The first plants will be built in Canada, followed by other plants in France, Mexico, Norway and South Africa. The company aims to become a leader in the hydrogen and e-fuels market for mobility and industry, areas where it is currently proving difficult to significantly reduce emissions.

Asset Based Business

The principal driver of the Group's investment strategy is its arbitrage-based business model which relies, amongst other things, on the control of storage and logistics to generate or enhance arbitrage opportunities and create long-term recurring income, making the company's business more sustainable. The Group seeks investment opportunities that can offer synergies with its core trading activities by facilitating recurrent supplies and outlets, whilst having their own industrial rationale. These assets bring optionality and flexibility to the trading books and are barriers to entry if they are not available to competitors. In this respect, the Group has taken ownership or interests in companies or assets which have 'stand-alone' capacity but largely remain within the same commodities industry as its core trading business.

The Group has established three main industrial groups: Puma Energy, which manages the Group's oil storage and distribution assets; Impala Terminals, which manage the Group's bulk-commodity warehousing and infrastructure assets; and the Mining Group, which manages the Group's existing mining operations as well as sources and develops new mining exploration opportunities. In July 2019, a fourth group was added with the consolidation of Nyrstar, the world's third largest producer of zinc metal, following a restructuring process. The four industrial groups are structured as independent

companies with their own dedicated management and resources, transacting with the Group on an arm's length basis, with service level agreements in place where appropriate.

The financials of three of the four industrial divisions: Impala Terminals, the Group's Mining Group and Nyrstar are consolidated into the Group's financial statements. The Group's fourth industrial division, Puma Energy, is minority owned, following a sale of a portion of the Group's stake to existing shareholders in 2013 (bringing Group's share below 50 per cent.) and a pro rata capital increase in 2015. Puma Energy results are therefore no longer consolidated into the Group's accounts, but rather are represented as an equity-accounted investee.

The Group's industrial assets generate substantial profit in their own right, either through recurring income generation or profit on disposals, further diversifying the Group's sources of income. Total industrial assets amounted to USD 8,031 million as at 31 March 2020, an important decrease from September 2019 mainly driven by reduction in the value of the Group's stake in Nayara Energy and Puma Energy. Indeed, an assessment of the negative impact of the Covid-19 pandemic on global energy demand, and increased global crude oil supplies causing refinery margins to reach record lows, led to an impairment of USD 287 million in the value of the Group's stake in the Nayara Energy oil refining operation. At the same time, the value of the Group's holding in the downstream company Puma Energy, which is being restructured having reported a loss for its 2019 financial year, was USD 1,452 million on 31 March 2020. A USD 293 million reduction from 30 September 2019, as a result of losses recorded over the period and a negative foreign currency translation impact.

Puma Energy Group: Trafigura's Oil Storage and Distribution Affiliate

Puma Energy is a leading integrated storage and distribution company focused on safely providing energy solutions to customers in 46 countries across the Africa, Central and Latin America, Europe, Middle East and Asia Pacific. The company has 2,900 retail sites, operations in 84 airports and a network of 103 storage terminals, with a total capacity of 7.5 million m^3. In 2019, Puma Energy sold 22.4 million m^3 of oil products and its facilities handled 14.2 million m^3 of petroleum products.

Since the Group acquired the rights to the Puma brand in 1997, Puma Energy has expanded its activities worldwide achieving rapid growth, diversification and product line development to become one of the largest independent global midstream and downstream companies. In 2000, Puma Energy came under the direct ownership and management of the Group, one of its original founding partners. In 2008, Puma Energy was reorganised as a separate and standalone division of the Group with a detailed carve-out plan and independent balance sheet. In order to support the growth of Puma Energy's fixed asset infrastructure development and acquisition strategy, the Group opened up the capital of Puma Energy to selected investors in 2010.

In 2013, the Group further reduced its ownership in Puma Energy by selling a portion of its stake to existing minority shareholders, including the Angolan state-owned energy company Sonangol Holdings Lda ("**Sonangol**") and Cochan Holdings LLC. Puma Energy also benefited from a capital contribution of USD 500 million from Sonangol. As a result of the sale and the capital contribution, the Group's stake in Puma Energy reduced below 50 per cent., leading to the deconsolidation of Puma Energy from the Group financial statements. In 2015, Puma Energy's main shareholders subscribed pro rata to a further USD 350 million capital increase undertaken by Puma Energy. This enabled the company to maintain its growth momentum by capitalising on opportunities to expand its portfolio of mid- and downstream assets. Puma Energy remains a very important part of the Group's business model; indeed, Puma Energy is the largest customer of the Group's oil and petroleum products trading division, accounting for c. 6.7 per cent. of the division's turnover in 2019.

For the year ended 31 December 2019, Puma Energy generated sales of USD 14,598 million; whilst EBITDA recorded USD 530 million.

Puma Energy Business Model

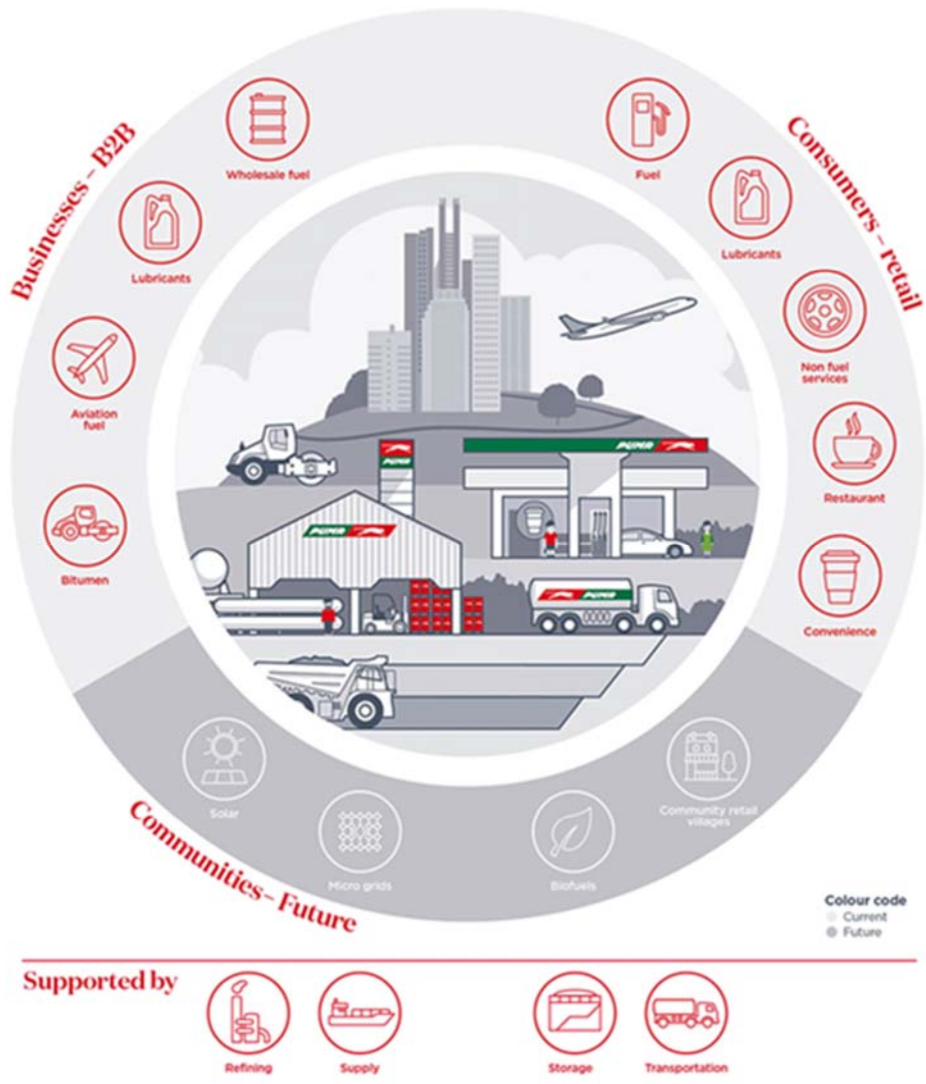
Puma Energy is highly diversified in terms of business lines, geographies and customers, serving more than 20,000 B2B customers from various countries and industries, with no single customer accounting for more than 3 per cent. of sales. The company delivers for its customers through a range of global business lines, including retail, B2B, lubricants, aviation and bitumen. Those customer-focused lines of business are supported by global refining, supply, storage and transportation infrastructure. Also, in the future, the

company is looking to serve the energy needs of towns and other local communities, with solutions such as solar, micro grids and biofuels.

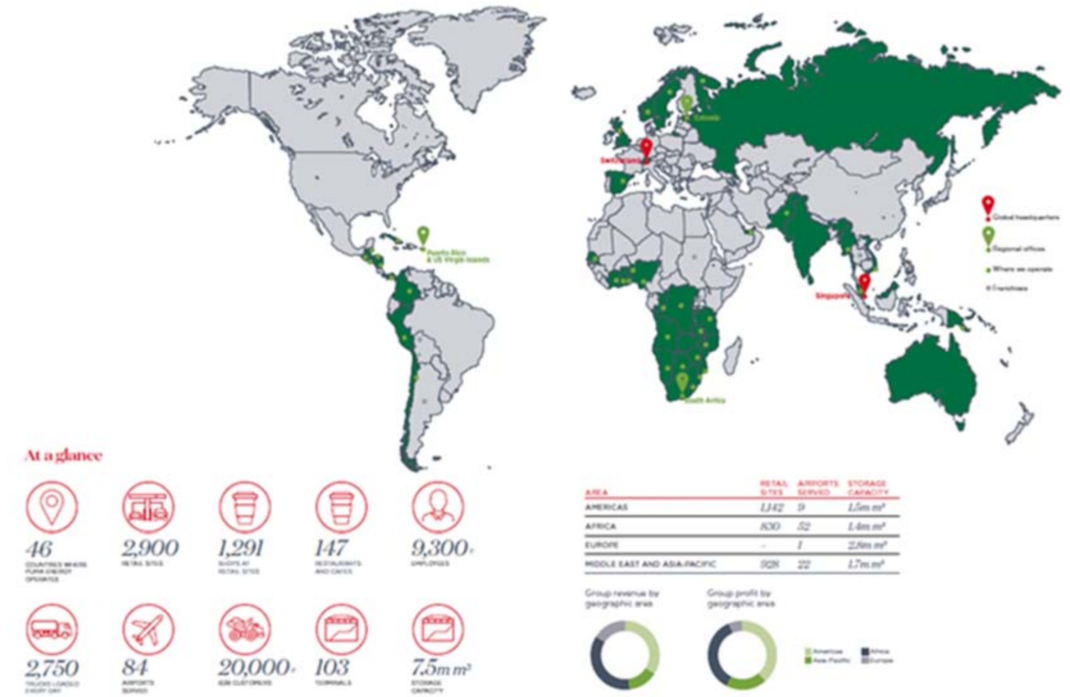
As of 31 December 2019, Puma Energy directly employed over 9,300 people. To support its activities, Puma Energy maintains regional offices in Johannesburg, South Africa (for Africa), San Juan, Puerto Rico (for Central and Latin America), Tallinn, Estonia (for Europe) and Singapore (for Middle East and Asia Pacific).

Puma Energy's unique business model combines downstream and midstream operations in strategic locations across emerging markets. The company's core business activities can be depicted as follows:

BUSINESS MODEL ACROSS THE VALUE CHAIN



PUMA ENERGY GROUP'S GLOBAL LOCATIONS AS AT 2019 END



Puma Energy provides customers around the world with secure access to a wide range of fuel and non-fuel products and services through its business lines supported by its global refining, supply, storage and transportation infrastructure:

- **Business lines**: Puma Energy's customer-focused business lines include Retail, B2B, Lubricants, Aviation and Bitumen. These activities represent Puma Energy's core business and accounted for about 79 per cent. of gross profit and 66 per cent. of EBITDA in 2019. It encompasses:
  - **Retail**: Puma Energy provides quality fuels, non-fuel products and additional services to end customers through its extensive network of over 2,900 service stations, which includes c. 1,300 convenience stores (under the Super7, Shop Express, or 7th Street brands), 150 restaurants and 185 car washes
  - **B2B:** Puma Energy supplies clean and/or heavy petroleum products to about 20,000 customers, which are highly diversified across geographies and industries. The distribution of bitumen is also included under the B2B segment
  - **Lubricants:** Puma Energy provides a range of high performance lubricants to consumers and businesses in over 30 countries around the world
  - **Aviation:** Puma Energy operates in 84 airports across Latin America, Africa, Asia Pacific and Europe, providing high quality fuel products and services to airlines, aircraft operators and aircraft owners
  - **Bitumen:** Puma Energy is a global market leader in bitumen, supplying customers around the world, who benefit from the integrated logistics services available at the company's terminals.
  - **Others:** the distribution of LPG, wholesale, and bunkering activities
- **Infrastructure:** Puma Energy's integrated global infrastructure includes refining, supply, storage and transportation. It ranges from storage terminals to transportation fleets to two refineries, in Papua New Guinea and Nicaragua. Puma Energy capitalises on its sourcing, storage and transportation capabilities to deliver fuel products to customers safely, reliably and cost effectively

Retail

- **Fuel**

Puma Energy sells fuel through 2,900 retail sites, which are mainly own-branded. These are located in the Americas, Africa, Australia and Papua New Guinea. The company has 1,291 shops at retail sites, as well as 147 restaurants or cafés. In 2019, 270 million drivers passed through Puma Energy's retail sites.

Puma Energy's retail business is focused on servicing customers in high margin growth markets. The company targets a market share of around 15-30 per cent. in the countries in which it operates, translating into economies of scale and higher margins.

Puma Energy operates different models for its retail operations from company owned and operated through to dealer owned and operated retail stations. The company supplies retail sites with quality fuels and offers customers competitive prices and friendly and efficient services in well-lit, clean and safe service station environments.

- **Non Fuel**

Alongside its fuel offer, Puma Energy provides a high quality retail experience to customers in its convenience stores, cafes, restaurants and other food options at welcoming and secure sites. As an energy business, Puma Energy understands the value of limited natural resources and therefore is always looking for ways to reduce its energy and water use, to this effect the company has rolled out energy efficient LED lighting across its network of retail sites.

Business-to-business (B2B)

Puma Energy supplies clean and/or heavy fuel products to over 20,000 B2B customers, typically covered by three- to five-year contracts. Its customers include many of the world's leading mining companies, and major businesses in key sectors, such as transport, power generation, industry, manufacturing, agriculture and construction.

The company's key competitive advantage in the B2B sector is its ability to ensure constant and reliable supply in an environment where logistics and infrastructure are highly constrained.

Lubricants

Puma Energy supplies own-branded lubricants and is the exclusive marketer of Castrol lubricants in certain Southern African and Central American countries. Puma Energy has a strong lubricants presence in more than 30 countries globally, serving the agricultural, construction, mining, industrial and transportation sectors of the market, as well as providing automotive lubricants.

Aviation

Puma Energy operates in 84 airports across Latin America, Africa and Asia Pacific, providing high quality products and services to airlines, aircraft operators and aircraft owners efficiently, safely and at competitive prices. Typically, services include the importation, handling, storage, bridging and transportation and onto-planes operations. In Central and South America, Puma owns and operates the fuel facilities at airports in El Salvador and Colombia and operates through joint operations in Belize, Nicaragua, and Guatemala. In the Caribbean, Puma operates in Puerto Rico, St Thomas Island and St. Croix in the US Virgin Islands. In Asia, the company supplies fuel at 11 airports in Papua New Guinea and distribute jet fuel to all of Myanmar's 11 airports. Puma also operates in Namibia, Botswana, Zambia, Malawi, Mozambique, South Africa (including O.R. Tambo International Airport in Johannesburg), Benin, Ghana, Zimbabwe, Democratic Republic of Congo, Senegal, Tanzania, Angola, Burundi, Nigeria and Swaziland, supplying fuel to airlines at 52 airports across Africa.

Bitumen

Puma Energy is a global market leader in bitumen, supplying customers around the world with high performance product safely, efficiently and on time. Customers benefit from the integrated logistics services available, through Puma Energy's own carrier fleet and state-of-the-art-terminals, including the largest private bitumen terminal in Europe (Cadiz, Spain). Puma Energy also has bitumen storage and

distribution facilities in Angola, Nigeria and Mozambique, Vietnam, Australia, Guatemala, and the United Kingdom.

Other activities

Other activities include:

- **Wholesale:** The supply of petroleum products to local distributors, which sell to independent retailers, commercial and industrial companies.
- **Bunkering:** Includes the supply of fuels and lubricants to shipping and rig operators, as well as logistics and management services to a fleet of bunker barges in Angola and supply of marine oil in the Republic of Congo.
- **LPG:** Storage, bottling and distribution of liquefied petroleum gas in Latin America, the Caribbean, West Africa and Papua New Guinea. The future focus lies on developing LPG bulk storage and wholesale operations in target markets.

Refining, storing and transporting fuel through an integrated global infrastructure

Given the accelerated closure of existing refineries and the resulting concentration towards 5-6 global refining hubs, there is an increasing need for physical transportation, as well as efficient and safe storage and handling of these products.

Across the world, Puma Energy owns and operates 103 terminals globally with a total storage capacity of 7.5 million m^3. These terminals handled 15.1 million m^3 of products for external customers in 2019, while focusing mainly on supporting Puma Energy's own downstream activities.

Refining is not part of the Puma Energy core business model. Puma Energy owns and operates refining assets selectively, depending on the supply logistics in that specific region and price regulation by local governments. Currently, the company operates two small refineries, one in Nicaragua and one in Papua New Guinea.

Global Presence

Puma Energy Group owns assets located worldwide and is organised into five key regions. The below diagram illustrates how Puma Energy's assets work together to facilitate global supply routes:

PUMA ENERGY GLOBAL NETWORK

Puma Energy Global Supply

Puma Energy's operations depend on a steady supply of refined oil products, and as a result, its supply activities are organised as separate business lines within downstream, retail and distribution operations. The supply business managed on both a regional and global level. Ultimately, the role of the supply function is to ensure that:

- requirements are managed at regional, rather than country level to capture economies of scale and to avoid unutilised space on vessels;
- develop expertise in inland logistics to optimise supply chain costs, truck routes and scheduling;
- price exposure is controlled using hedging instruments with a maturity between three months and one year; and
- products are sourced at competitive price levels.

Puma Energy Organisational Structure

Puma Energy is coordinated from its global headquarters in Geneva, Switzerland and directly employs over 9,300 people in 46 countries. Puma Energy is managed as an independent industrial group, with its own dedicated management, which transacts with its shareholders, the Group and Sonangol, on an arm's length basis. Puma Energy operates a two-tier management structure comprising a Board of Directors and an Executive Committee.

In March 2020, Puma Energy agreed to a shareholding restructuring transaction with the Group and Cochan Holdings. Cochan Holdings reduced its stake in Puma Energy from 15 per cent. to less than 5 per cent., by selling shares in Puma Energy to the Group. Thereafter, Puma Energy bought back and cancelled these shares. Puma Energy funded the re-purchase with a subordinated shareholder loan from the Group with an initial tenor of c. seven years. The parties completed the transaction in June 2020.

As a result of this transaction, the Group's shareholding in Puma Energy increased to 55.5 per cent. from 49.4 per cent as at 31 December 2019. However, following this transaction, the Group transferred approximately 5.5 per cent. beneficial interest to a trust and now owns a legal beneficial interest of 49.98 per cent. in Puma Energy.

Based on agreement between the shareholders, the power to direct the relevant activities of Puma Energy lies solely with its Board of Directors, and shareholders' rights are only protective in nature. The Group appoints three out of eight directors, and decisions by Puma Energy's Board of Directors are taken by simple majority. The Group therefore does not have the majority of decision-making power in the Board of Directors. It should also be noted that this transaction did not alter the existing shareholder agreement. Therefore, the increase in the Group's shareholding did not result in the Group gaining control over Puma Energy. Consequently, the equity investment in Puma Energy will continue to be accounted for under the equity method.

Recent Board or Management Changes

In March 2020, Mr. René Médori's appointment as Chairman of the Puma Energy Board of Directors came at a time when the company's executive management team focuses on accelerating delivery of its customer-led five-year growth strategy and balance sheet rationalisation. Mr Médori brings significant experience to the Board from his executive roles in the energy and natural resources sectors.

Impala Terminals: Trafigura's Bulk-Commodity Terminals, Warehousing and Logistics Assets

Impala Terminals is a multimodal logistics provider and infrastructure development group focused on export-driven emerging markets, through the ownership and operation of ports, terminals, warehouses and transport assets which offer end-to-end logistics solutions for dry and liquid bulk cargoes, general cargo and containers. Impala currently operates in 30 locations worldwide; including 13 owned and operated port assets.

In 2018, the decision was taken to bring in a strategic partner who would support the growth of the Impala Terminals business into new markets and services, through handling increased volumes from the Group and third parties. In September 2018, the Group agreed to establish a long-term partnership with

global fund manager IFM to invest in and operate certain Impala Terminals assets. A 50:50 joint venture – Impala Terminals Group S.à r.l, incorporated in Luxembourg – was created to own and operate a network of concentrates terminal infrastructure in Mexico, Spain and Peru, which plays a key role in the movement of copper, lead and zinc in the global market. The joint venture also included fluvial operations in Paraguay and a Swiss-based operation providing global freight forwarding, as well as multimodal transportation services in the African Copperbelt for the Group and third party clients.

The agreement, which closed in December 2018, created the basis to bring together the Group trading know-how, the Impala Terminals operations expertise with the investment experience of IFM. The chosen partner, IFM, is an experienced and well-respected fund manager, backed by 27 Australian pension funds. IFM has a specialist focus on infrastructure investment and a 23-year track record, mainly in investments in Australia, North America and Europe. It contributes its own expertise to the joint venture as well as leveraging the accumulated skills and know-how in Impala. This is a partnership with two-high quality complementary parties with a shared focus on long-term success.

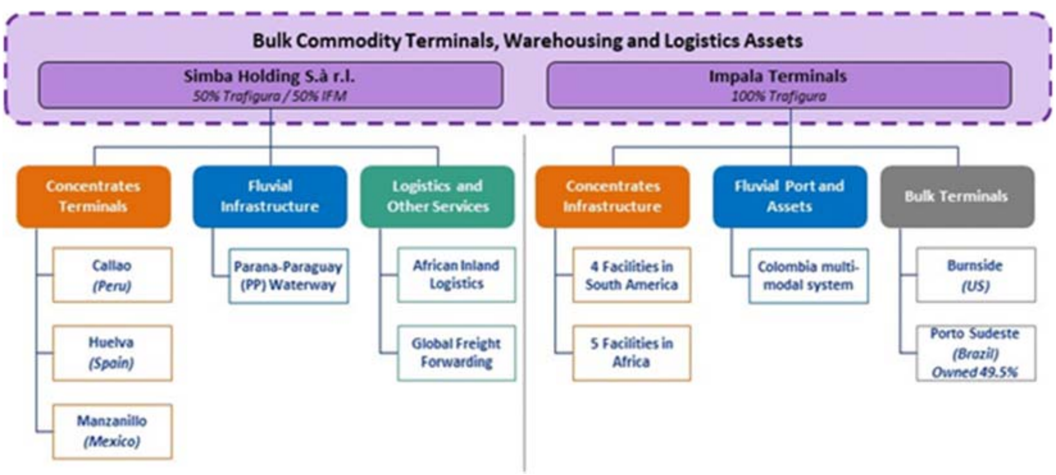
The transaction generated USD 191.2 million of exceptional profit for the Group, and the Group received a total consideration of USD 247.9 million, which was recorded as a receivable from related parties as of 30 September 2018 (and received during the month of December). As of 30 September 2018, Simba was deconsolidated from the Group's balance sheet.

This transaction provides a tangible example of the value created at Impala over the years, enabling the Group to re-invest its funds into new projects to generate additional trade flows. It also creates a robust governance framework at Impala, which operates at arm's length with the Group under, an independent management team, specific corporate governance and clear board rules.

The joint venture also created a new partnership for future investments in infrastructure related to commodities as well as a solid platform for future growth – both in existing Impala locations and markets, and in neighbouring countries – as demonstrated in October 2019 with the purchase of Puma Energy's business in Paraguay, including two fuel storage terminals and c. 180 retail sites.

The bulk commodity terminals, warehousing and logistics facilities of Impala Terminals and the Simba joint venture are outlined below:

IMPALA TERMINALS GROUP STRUCTURE



Assets operated under the joint venture with IFM

The assets operated by Impala Terminals Group S.à r.l. include three concentrates terminals strategically located in Mexico, Spain and Peru – countries well positioned on copper, zinc and lead concentrate export markets – with a total throughput capacity of approximately 6.4 million tonnes. Simba also manages a fluvial transportation network located on the Parana-Paraguay River and recently acquired Puma Energy's storage and distribution business in Paraguay. Finally, the joint venture provides end-to-end

logistics solutions for stranded mineral resources and value-add central services of consulting and freight forwarding.

Simba also provides logistics and multi-modal services in various region, of which Africa, comprising solution for warehousing, short and long hauls, via trucks and trains, as well as sea freight. Moreover, the company offers end-to-end delivery solutions for imports and exports via a combination of road and rail networks combined with onward ocean container freight services.

Concentrates Terminal in Peru

Impala in Latin America originated in Peru with a non-ferrous concentrates warehousing and blending operation in Callao, Peru's main commercial port. This terminal is the largest facility in Latin America for handling copper, zinc and lead concentrates. In 2017, Impala completed a project to cover 175,000 m^2 of warehousing space (the largest covered warehouse in Latin America). The warehouse is the most environmentally compliant in Peru as it controls and measures air, water and soil particles to ensure that protection extends from both inside to outside the walls of the facility. The operation at Callao includes a participation in a consortium which operates a circa 3-km conveyor, which transports bulk metal concentrates safely and efficiently to a dedicated berth. It has throughput capacity of 2.8 MMT and per-hour conveyor belt capacity of 2,300 MT.

Concentrates Terminal in Spain

Impala Terminals has further developed its operations in Europe through the construction of a bulk concentrates terminal in the Port of Huelva, Spain. The facility started operations in September 2015 and handles about 1 million tonnes of import and export product per year. The 240,000 MT of warehouse static capacity allows for the storage and blending of these products, which can then be loaded onto ocean going vessels via a 550-metres long private berth. Impala also has the option to develop circa 70,000 sqm of land adjacent to the berth, thereby potentially expanding the capacity of the terminal.

Fluvial Infrastructure at Parana

The fluvial transportation network located on the Parana-Paraguay River, one of South America's most important waterways connecting Argentina, Uruguay, Paraguay, Brazil and Bolivia and has become one of the most important economic development areas enabling domestic and international trade. With an investment of over USD 100 million, Impala Terminals created a reliable fluvial corridor, shipping liquid products including diesel and gasoline fuel over a distance of 2,785 km. Current fleet is composed of 4 pushers and 27 double hulled tanker barges (with approximately 530,000 cubic meters throughput capacity) and could grow over the next few years as the Group and third party volumes are steadily increasing.

In October 2019, Impala acquired Puma Energy's business in Paraguay for c. USD 200 million, which includes two fuel storage terminals with c. 72,300 cubic meters and a network of retail sites. This acquisition presents good synergies with the existing fluvial logistics operations along the Parana-Paraguay waterway.

Global Freight Forwarding

Impala Terminal's ability to secure competitive rates is aided by the strong relationships with all the major shipping lines and Impala Terminals expertise in world-class logistics solutions. Through large global captive volumes and a continuous drive for operational excellence, the container bookings are growing substantially, particularly across Latin America, Europe, Africa and Middle East. Besides offering freight forwarding services, through the extensive network and terminal assets Impala Terminals offers various value added services such as container stuffing and un-stuffing, container storage, sampling and testing and documentation formalities.

Non-Impala Terminals Joint Venture assets

Fluvial and Port Infrastructure in Colombia

In Colombia, Impala has invested around USD 1.1 billion in an unprecedented project to transform the country's commodity transport network. This investment has allowed the company to develop best-in-class infrastructure and warehousing services, which are underpinned by a world-class multimodal

logistics system. Together these elements connect Colombia's inland areas of production and consumption to international markets via the ocean ports of Barranquilla and Cartagena on the Caribbean coast. By having this oversight of the entire logistics chain, Impala provides its customers with safe, efficient and economic delivery of products. Moreover, by switching the dominant mode of transport from trucking to barging in the north of the country, Impala Colombia is creating a more environmentally responsible form of trade. Significantly safer than transporting products purely by truck, this fluvial system not only reduces freight costs but is also inherently much more efficient. The inland port has a storage capacity of over 780,000 barrels of crude oil and naphtha and disposes of over 150,000 TEU of container storage. Impala also owns and operates a fluvial fleet of 100 double hull oil and dry barges and 18 pushers. The products handled are diverse combining crude oil, naphtha, fuel oil, LPG and Dry Bulk Steel, showing the added value of Impala logistics in the Magdalena River.

In October 2019, the National Infrastructure Agency (ANI) launched the prequalification process for the long-anticipated project to dredge and dyke the Magdalena River, which will enable deeper draught and therefore increased operational efficiencies and volumes carried by the fluvial fleet. The concession contract is expected to be awarded for a duration of 15 years, aiming at guaranteeing 24/7 navigation from Barrancabermeja, where the inland port is located, to Barranquilla/Cartagena (Atlantic coast). Impala is well positioned operationally and commercially to derive the benefits as soon as the project begins.

NON-JOINT VENTURE ASSETS (100% OWNED)

Bulk Terminals in Brazil

In 2014, the Group acquired indirectly a c. 50 per cent. equity stake in Porto Sudeste do Brasil ("**PSB**") alongside Mubadala Development Company ("**Mubadala**"), the Abu Dhabi sovereign development fund. In parallel to acquiring c. 99 per cent. of the PSB equity, the Group and Mubadala purchased c. 90 per cent. of the PSB (FPOR11/PSVM11) debt securities on a combined basis. Those debt securities, which are junior to debt but senior to equity, provide cash flow benefits whereas equity provides control of PSB. Indeed, holders of the debt securities are entitled to receive quarterly variable income based on the volumes handled by PSB and a fixed royalty, payment being made subject to availability of cash, and otherwise accrued. The combined holding of PSB debt securities and PSB equity provides full benefit of ownership (i.e. both economic and control).

PSB is a USD 2 billion iron ore export terminal, which is located in Itaguaí, about 90 km west of Rio de Janeiro, Brazil. The port commenced operations in August 2015 and has the capacity to handle 50 million tonnes of iron ore per year and scope to expand to 100 million tonnes. The port gives Brazil's independent miners a competitive alternative to existing export terminals and offers them unprecedented access to global markets, for the 2nd largest producing country, representing 22 per cent. of world supply.

In 2017, PSB's debt package was restructured in order to better match the port's expected operational performance with anticipated cash flows and debt repayment profile. In addition, Porto Sudeste signed new logistics contracts with Mineração Morro do Ipê S.A. ("**MMI**") in respect of the Ipe iron ore mine as well as a contract with Mineracao Usiminas separately. However, the ramp-up in volumes has been slower than initially expected and the Group's investment in PSB (in the form of equity and debt

securities) has been gradually impaired from USD 906 million in 2015 (operational launch of the port) to USD 468 million at 30 September 2019, hence a 48 per cent. impairment to date. Noting that, being junior to the debt securities, equity is negatively impacted by accrued amounts due under such debt securities (e.g. when positively impacted by the de-risking of the port operations), and vice versa.

Since payment on the debt securities are dependent on PSB's handled volumes, they are classified at fair value through profit and loss (as per IFRS13). Considering FPOR11 free float is very thin (c. 10 per cent.) and traded volumes very limited (with average volume traded per day below USD 5,500), in the absence of normal market activity, it has been concluded that no active market exists for the FPOR11 and therefore the fair value should be determined based on a valuation model (level 3 approach) rather than relying on market price (level 1), that would be lacking economic ground. The fair value of FPOR11 is therefore based on a discounted cash flow calculation based upon the business plan of PSB. Periodic impairment testing is conducted and supported by third party independent valuation analysis.

However, the volumes handled at PSB reached around c. 16 MMT in calendar year 2019, c. 50 per cent. more than in 2018. In parallel, the Group and Mubadala are still planning to source additional volumes from mines they operate in the region (e.g. Tico Tico) for export through PSB in the mid-term, however noting that progress is still reliant on the speed of the permitting process.

Bulk Terminals in the United States

In June 2011, Impala acquired the Burnside coal terminal in Louisiana, USA. Located on the east bank of the Mississippi River at Mile 169.9, the terminal consists of a site of about 1,100 acres, with a deep-water berth and ship loading/unloading equipment. Impala Terminals Group has refurbished and expanded the facility into a state-of-the-art major bulk terminal for coal, bauxite and alumina. The facility has a capacity of circa 10 MMT annually and is capable of loading cape size class bulk vessels. Burnside has the potential to be the only coal terminal on the Mississippi with the capability to handle ocean vessels, barges and rail, thus allowing rail-to-vessel and barge-to-vessel capabilities. Phase 1 of the terminal was completed in June 2014 and the facility received its first million tonnes in March 2015. During 2019, the terminal operated well and launched a development project to diversify cargos handled in light of the drop in US coal exports.

Warehousing in Africa and Middle East

In Africa, Impala Terminals operates a portfolio of safe and efficient warehouses and port terminals, which provide handling, storage and other related services for both bonded and non-bonded cargoes. At its warehousing sites in the Democratic Republic of the Congo (DRC), Tanzania and Zambia, Impala Terminals offers enhanced services for the safe and secure handling of goods and employs the latest technology and processes.

Impala Terminals is a major player in the African Copper belt, Southern, Eastern and Central Africa and is currently expanding its logistics capacity serving these regions by rail, truck and ocean container freight. This will allow producers and consumers to access international markets with greater speed, efficiency and safety whilst reducing cost. As an example, a large new warehouse facility was opened near Lubumbashi to handle increasing volumes of copper exports from the DRC.

Impala Terminals also operates a dedicated warehouse in Jebel Ali Free Zone Area (JAFZA) in Dubai, operating storage and handling of refined metals and third-party goods. Impala Terminals is strategically located within 10 km of the two biggest container terminals within Jebel Ali free Port, which offers a great competitive import and export advantage to its customers.

Mining Group: Trafigura's Mining Assets

*The Mining Group ("**TMG**")* invests in mining assets that are closely related to and have strong synergies with the Group's core metals and minerals trading business. Encompassing operations in Europe, Latin America, North America and Africa, its investments include wholly owned subsidiaries in addition to cornerstone shareholdings in both private and publicly traded entities. TMG employs thousands of people worldwide (some on a consolidated basis, e.g. at Catalina Huanca), including highly skilled personnel such as geologists and engineers.

The Mining Group focuses on the participation in and development of mining projects globally. The flagship MATSA copper mine in Spain, a 50-50 joint venture with Mubadala, had a solid year for

production and for metallurgical yield, with increased cost control contributing to a satisfactory financial result. For most of the other TMG's assets, stabilisation and improvement of operations and satisfactory performance were the themes of the year.

Similar to the rest of the Group, TMG has demonstrated its ability to divest fixed assets and recycle capital over the years, completing the successful (partial) divestment of a number of investments, such as Anvil, the Compañia Minera Condestable SA ("**CMC**") and MATSA.

Iberian Minerals / MATSA

In 2013, the Group completed the purchase of Iberian Minerals Corp ("**Iberian**") following a squeeze out process, giving the Group 100 per cent. ownership in the mining group. Iberian's main asset was the company Minas de Aguas Tenidas SAU ("**MATSA**") , but it also held a mine in Peru at the time the Group purchased Iberian. MATSA owns and operates mines located on the Iberian pyrite belt in Southern Spain. The Iberian pyrite belt is well known amongst the international mining community, since it hosts one of the largest occurrences of volcanic massive sulphide ("**VMS**") deposits in the world. This belt extends from north of Seville, Spain to almost the west coast of Portugal spanning an area approximately 250 km long and 50 km wide.

MATSA started production in 2009 with the Aguas Tenidas mine and is now operating two additional mines, called Magdalena and Sotiel. Magdalena commenced production towards the end of 2016 following its discovery in 2014; such turnaround from discovery to start of operation is an industry record. Sotiel is an older mine reactivated in 2015.

Over the years, MATSA has accumulated exploration permits in Spain, mainly located around the Aguas Tenidas mine. The expertise and success acquired by MATSA's operational and metallurgical teams in mining and processing these sulphide ores created a bigger incentive for MATSA to become more aggressive in its exploration activities, leading to some important finds. The Magdalena mine is one important find, along with increased resources and reserves at Aguas Tenidas and further exploration of other ore bodies located nearby.

MATSA produces mainly copper and zinc concentrates, along with lead concentrate on a small-scale. The Group completed a EUR 300 million expansion project including a new treatment plant which increased treatment capacity from 2.3 million tonnes per year in 2014 to 3.6 million tonnes in 2015 and 4.4 million tonnes in 2016 (flat since then).

In June 2015, Iberian signed a share purchase agreement with Mubadala. Under the agreement, MATSA was transferred to a joint venture held 50-50 by the Group and Mubadala and, by September 2015, MATSA had been deconsolidated from TGPL's balance sheet. The restructuring of ownership at MATSA, with the arrival of Mubadala, prompted a comprehensive review of the mine's governance in order to align its objectives and culture with those of both its shareholders. A new General Manager was appointed, who is an experienced mining professional with a strong track record at mining majors. Some other members of the management team were also changed, sharpening the focus on cost control and safety management. The cultural challenge came on top of an economic one, with the fall in copper prices during the financial year 2016 creating a fresh need for cost efficiencies.

MATSA is by now a world class mining and processing complex, using state of the art technology, including driverless loaders underground, remote control mine ventilation and water pumping, and a very high level of automation in the plant that has allowed rising metallurgical recovery up by c. 10 per cent. points over the last few years, despite the metallurgical complexity of the ore. Also worth noting was a continued improvement in safety performance, with a continued reduction in the lost time injury frequency rate.

In 2019, the Group continued to invest in IT and automation, and combined with the improvements made over 2018, this should help the MATSA mines to further increase productivity next year, underlining resilience in the face of expected lower metal prices.

Catalina Huanca Sociedad Minera S.A.C.

Catalina Huanca is a wholly owned zinc and lead underground mine in Peru. A concentration plant treats around 700,000 tonnes of ore per year and produces high quality zinc and lead concentrates. The mine was acquired in 2005. At that time, the operation was artisanal in nature and the Group has progressively

modernized it and brought it to international standards, in terms of mechanization, and also health, safety, environmental and community standards. The mine performed well in 2019, meeting its production targets, with step changes in safety performances. It is now undergoing another step change in its organisation, productivity and cost structure, with the implementation of a new mining method (open-stoping with paste-filling, similar to MATSA).

*Atalaya Mining Plc. ("**Atalaya**")*

The Group owns a 22.4 per cent. stake in Atalaya Mining Plc, formerly known as 'EMED'. Atalaya originally restarted the Rio Tinto mine in Southern Spain (mine is located c. 40 km away from MATSA operations). The Group has the offtake over c. 20 per cent. of the life of mine reserves. The mine restarted production during the third quarter of 2015 and reached commercial production in February 2016. In December 2017, Atalaya raised GBP 31 million via a share placement. As part of the placement, Trafigura Group Pte. Ltd., through its subsidiary Urion Holdings (Malta) Ltd, slightly increased its ownership to 22.4 per cent. Proceeds were used to increase the plant's capacity from 9.5 Mtpa to 15 Mtpa at its Rio Tinto mine.

Nyrstar

Nyrstar is presented in details in the following section "Nyrstar" – noting that the Mining Group is providing technical and operational services to Nyrstar, and manages directly, on behalf of Nyrstar, the Canadian mining operations. Most relevant, the Langlois mine (Quebec) was closed in December 2019 due to low reserves and complex ground control conditions. On the other hand, the Myra Falls mine (British Columbia) is ramping up towards its long-term target of 800k tpa.

*Empresa Minera del Caribe S.A. ("**Emincar**")*

The Castellanos zinc and lead project in Cuba consists of an open-pit mine and a concentration plant, in which construction began in 2015 and was completed in October 2017. The project is between the Group and the Cuban government and is the largest industrial investment in course on the island. It was delivered on time and within budget. The focus in 2018 was on ramping up production while addressing the inevitable initial operational and quality issues. By the end of the year, significant progress had been made and the plant was rising progressively towards its design capacity of 1 million tonnes per annum. For the full year 2018, 800,000 tonnes of ore were treated, and the mine already generated a profit. In 2019, the mine overcame some operational issues to achieve a significant improvement in plant performance, both in terms of overall throughput and concentrate quality, closing the year with favourable budgets. Total production rose to the original capacity level of 1 million tonnes, while ongoing work on increasing the capacity during the year has now raised potential production to 1.2 million tonnes for 2020. Emincar employs approximately 700 people and is another illustration of the Mining Group's ability to put its expertise and investment to work in challenging economic or political environments.

*Mineração Morro do Ipê S.A. ("**MMI**")*

In 2016, Mubadala and the Group acquired stakes in the Ipê and Tico-Tico mines and processing units located in the Serra Azul mining region of Minas Gerais, Brazil that were previously owned by MMX. To manage these assets a new company, Mineração Morro do Ipê S.A., has been established with Mubadala and the Group each holding 37 per cent. of shares and the remaining 26 per cent. owned by MMX's creditors, who approved the initiative following a judicial recovery plan. Following a capital increase during the year, Mubadala and the Group's shareholding increased to c. 40 per cent., diluting minority shareholders.

The majority shareholders have invested c. USD 69 million in the Ipê and Tico-Tico mines and processing facilities to date. MMI employs c. 200 people directly, and roughly the same amount of permanent contractors, and first ore was produced in March 2017. Up to 2021, operations are planned to focus on processing existing iron ore stocks. In 2019, the tailings dam incident at Vale's Brumadinho mine affected production at the Ipê mine directly and indirectly. Indeed, production was reduced to 1.5 million tonnes of iron ore compared to 1.9 million tonnes budgeted in 2019.

In parallel, MMI is working to conclude the permitting process to reopen the neighbouring Tico-Tico mine and build a new 5.5 Mtpa processing plant. Once the Tico-Tico plant is constructed in the course of

2021, it will process the mine's friable ore, a more competitive and better quality iron ore, enabling the production of high-quality pellet feed.

A new environmental licensing process is followed for the Tico-Tico mine, including the development of environmental impact studies that are appropriate for the scope of the new project. These include treating tailings from the processing of iron ore through a system of filtration, drying and stacking which is environmentally and socially friendly, removing the need for tailing dams. The Group received permission in the first half of 2020 and the mine is expected to start in early 2021.

Galena Asset Management

Galena Asset Management's teams operate wholly independently of the Group, but benefit from the TMG expertise. The Resources Fund raised USD 400 million in 2013, and additional USD 225 million in 2019, to invest in the equity and debt of metals and mining companies. Galena is discussed in details in a following section "Galena Asset Management".

Nyrstar

Nyrstar is a global multi-metals business, with a strong market position in zinc and lead, and growing positions in other base and precious metals. It is one of the world's largest zinc smelting company. Nyrstar's business has mining, smelting and other operations located in Europe, the Americas and Australia and employed approximately 4,200 people as at 30 September 2019.

Global Presence

Nyrstar has global operations, with smelters and mines close to key customers and major transport hubs to facilitate delivery of raw materials and distribution of finished products. The map below illustrates Nyrstar's current operations.

NYRSTAR GLOBAL PRESENCE

Note: As part of the restructuring process presented below, headquarters are being relocated from Zurich to Budel (The Netherlands), closer to the smelting assets

Nyrstar has two key operating segments: metals processing and mining.

Metals Processing

The metals processing segment comprises six smelters in Auby (France), Balen (Belgium), Budel (The Netherlands), Clarksville (U.S.), Hobart (Australia) and Port Pirie (Australia), and a fumer at Høyanger (Norway). Zinc smelting is the process of recovering and refining zinc metal out of zinc containing feed material such as zinc containing concentrates or zinc oxides. While Nyrstar's smelters are mostly primary zinc smelters, its smelter in Port Pirie is a primary lead smelter with multi-metal recovery capabilities, i.e. with the possibility to process a wide range of lead-containing feedstocks to produce refined lead, zinc in fume, silver, copper and gold (further information on the Port Pirie smelter is set out below).

Having produced approximately 1.0 million tonnes of zinc metal in 2019 (vs. 1.1 million tonnes in 2018), the company's share of the global zinc metal market in 2019 was 7.2 per cent. (vs. 8.1 per cent. in 2018). As a result, Nyrstar ranked as the third largest producer globally in 2019, after Korean Zinc Co., Ltd. and Glencore, which benefited from respectively a 8.9 per cent. and 7.5 per cent. market share in 2019 according to Wood Mackenzie.

The fumer provides technology to capture maximum value from Nyrstar's leach products (secondary by-products produced by the smelters). Nyrstar Høyanger makes use of the cleanest and most efficient technology available for recycling by-products of the primary zinc industry and zinc-containing alkaline batteries. Through the technologies of a furnace (using very high temperatures), Nyrstar Høyanger extracts valuable metals from the Nyrstar leach products. The new plant installation includes a highly energy efficient furnace and scrubbers, minimising SO2 emissions in the Høyanger area.

Mining

The mining segment currently consists of Nyrstar Tennessee Mines (U.S.A.), Myra Falls and Langlois (Canada). In the last four years, the mining segment sales to the metals processing division accounted for approximately 98 per cent. of the segment's revenue in each of those years. In 2018, according to Wood Mackenzie, Nyrstar's zinc mining operations were the fifteenth largest in the world (based on that year's production). Nyrstar is currently rolling out optimisation plans for its North American mining assets (see below).

Main economic drivers of Nyrstar's business

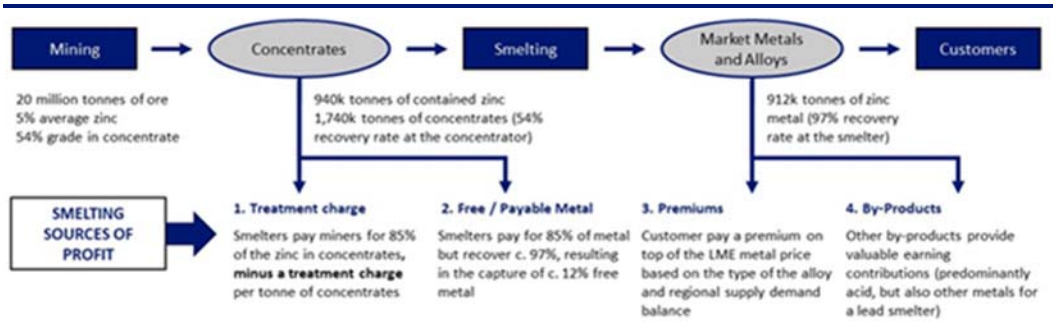
General

Smelters are essentially processing businesses that generate earnings on the concentrates and other feedstocks they convert to primary metal and valuable by-products. The mining segment generates earnings on the minerals it extracts and subsequently processes into concentrates. Profits that Nyrstar realises through the production and sale of refined zinc, lead and other metals (metals processing segment), and through the production and sale of concentrates (mining segment) are affected by a number of interrelated factors, most notably the commodity prices for zinc and lead and the treatment charges ("**TCs**") for processing of zinc and lead concentrates. These pricing dynamics are conceptually similar but differ in specifics for zinc, lead, and other base and precious metals. The focus in the discussion below is on the metal processing segment and the remuneration components.

Economic drivers of the Metal Processing segment

The below chart illustrates the elements of gross profit of the smelting business (rates presented below are indicative only).

ELEMENTS OF GROSS PROFIT OF THE SMELTING BUSINESS



A smelter earns revenue from the four following elements:

- The **TCs** received from the mine to process the metal in concentrate into the refined product;
- The value of **free metal** it can produce and sell over and above the metal content it has paid for in concentrates purchased from the miner;
- The **premium** it can earn on the refined products it sells to its customers (i.e. sales of refined metal made by the smelter at prices above the LME prices); and
- **Sale of by-products** extracted from the process of refining zinc and lead.

While the relative weight of the contributors to smelter margins will vary according to the relationship between metal prices and TCs, Nyrstar's metals processing segment and other smelters have historically obtained the majority of their margins from TCs and to a lesser extent from free metal, metal premiums and by-product sales.

Focus on TCs

The market price of zinc is a key component in determining the value of the zinc contained in concentrate. The dynamics of how that value is shared between mining companies and smelting companies are driven primarily by the relationship between the global supply of zinc concentrate from miners and the global demand for zinc concentrates by the smelters. In a market situation where the demand for zinc concentrates is greater than the supply, a relatively greater share of the zinc metal value and lead metal value will typically go to the miner. Conversely, when concentrates are relatively abundant, the opposite occurs and a greater share of such value is typically captured by the smelter.

Negotiation of the applicable TCs is a key mechanism by which the value of the contained zinc in concentrate shifts between the miner and the smelter. As is customary in the industry, smelting companies generally negotiate TCs with each supplier of zinc concentrate annually, early in the contract year, based on the smelting company's and the miner's expectations of future market conditions. In any given year, TCs tend to settle around norms established through negotiations between the major buyers and sellers of concentrate. These norms are commonly referred to as the "Benchmark" TC. A spot TC market also exists; however, it is relatively illiquid.

Nyrstar's results therefore correlate to the levels of TCs that it charges zinc miners to refine zinc concentrates and lead miners to refine their lead concentrates. These TCs are cyclical in nature – see below for more information on the Zinc TCs (historical level and outlook).

Other components of the smelting remuneration: free metal contribution, premiums and by-products

Free metal in relation to zinc is the value of the difference between the amount of zinc that is paid for in the concentrates and the total zinc recovered for sale by the smelter.

In a typical zinc concentrate contract, the metals processing segment pays the mine for 85 per cent. of the zinc contained in the purchased concentrate, which has historically been the industry standard. Assuming the zinc smelters achieve an average zinc recovery of approximately 97 per cent. (this would depend on the concentrate quality and production efficiencies), the value of the free zinc of 12 per cent. (being the difference between 97 per cent. and 85 per cent.) is retained by the smelter.

In a standard lead concentrate contract, the metals processing segment typically pays the mine for 95 per cent. of the lead metal contained in the concentrate. Accordingly, the proportion of free lead metal the metals processing segment obtains (being the difference between the amount of refined lead metal recovered for sale and the amount of lead metal paid for) is less than the equivalent proportion for zinc. If lead recoveries are approximately 98 per cent. to 99 per cent., the amount of free metal is c. 3 per cent. to 4 per cent. of the lead in the concentrates. In addition to lead concentrates, Port Pirie also feeds leach products with significantly lower lead payables, which results in higher amounts of free metal.

Nyrstar's focus on operational excellence aims to allow extracting maximum free metal to supplement earnings coming from TCs. Moreover, the free metal is expected to increase with Port Pirie fully operational and higher value feedstock processed.

A premium is the difference between the base LME price and the higher price that the metals processing segment achieves on sales of the refined zinc and lead metal. The premium reflects a combination of factors, including the service provided by the smelter in delivering zinc or lead of a certain size, shape or

quality specified by its customers and transportation costs, as well as the conditions of supply and demand prevailing in the regional or local market where the metal is sold. Premiums tend to vary from region to region as transportation costs and the value attributable to customer specifications tend to be influenced by regional or local customs rather than being a function of global dynamics. Based on Nyrstar's Research & Development activities and technical know-how, a significant portion of Nyrstar's zinc and lead production is expected to be above standard commodity grade.

Although the metals processing segment's principal products are zinc and lead metal, it also sells silver, copper, gold, indium, sulfuric acid and other by-products from the process of refining zinc and lead. Nyrstar intends to further monetise these by-products. The quantity of by-products produced is dependent on a number of factors including the chemical composition of the concentrate and the recovery rates achieved. Concentrates from some mines contain higher levels of by-product metals than concentrates from other mines. In addition, the higher the rate of by-product recovery, the greater the amount of by-products that can be produced and sold. By volume, sulfuric acid is the major by-product the metals processing segment produces and sells.

Port Pirie redevelopment project and ramp-up

Port Pirie is an integrated multi-metals recovery plant with the flexibility to process a wide range of lead rich concentrates and smelting industry by-products. Port Pirie is one of the world's largest primary lead smelting facilities and the third largest silver producer, which allows it to generate significant economies of scale.

The Port Pirie redevelopment project, started in 2013 (feasibility studies), involved the conversion of the Port Pirie operations into an advanced metal recovery and refining facility enabling the facility to capture a greater proportion of the value contained within the feed material consumed by its global network of smelters as well as third party residues. Moreover, it aims to reduce environmental footprint, providing a step change reduction in airborne metal and dust emissions.

The redevelopment of the Port Pirie smelter was commissioned in January 2018. The smelter encountered some technical difficulties during the first months of its operation, including some technical process bottlenecks, which resulted into a reduction in free metal extracted from the feed processed by Port Pirie and periodic production outage.

In August 2019, an incident occurred with the hearth in the primary smelter which resulted in a forced shut down. The issue was related to the bricks that line the Top Submerged Lance ("**TSL**") furnace as those had been prematurely fatigued due to the thermal expansion and contraction of the bricks that had occurred over the past twelve months with the increased number of starts and stops caused by planned and unplanned outages. The company decided to stop the TSL furnace for approximately 3 months to manage the re-bricking.

In November 2019, the Port Pirie smelter was restarted and the site returned to full production. The recent investment and refurbishment of the primary TSL are expected to result in further reduction in emissions, improved operability and should contribute to more stable operations at the plant. As of today, the ramp-up at Port Pirie is proceeding according to plan with the availability rate in line with budget as of Q1 2020, and the Group is focused on environmental compliance and safety.

Operational and financial issues – 2019 restructuring process

For five years, the Group has been a significant shareholder of Nyrstar Group, initially acquiring its shareholding through various acquisitions between October 2014 and February 2016, to finally reach a circa 24.4 per cent. stake. The Group has had commercial arrangements with Nyrstar since its inception in 2007 and longer term-structured arrangements since acquiring a substantial shareholding in the company during 2015.

In 2018, Nyrstar was impacted by a number of operational and financial issues which negatively affected its performance, including:

- Cost overruns and delays in the completion of the redevelopment of Port Pirie smelting facility and subsequent ramp-up;
- Delays in restarting operations at the Myra Falls mine and weak operating performance at the "Middle Tennessee mines";

- Historically low TCs for zinc and lead concentrate over 2017 and the first six months of 2018 (see below); and
- Increased energy costs with respect to the smelting operations in Europe and Australia.

In October 2018, Nyrstar issued its third quarter interim management statement reporting that the company had performed materially below the results achieved in the first half of its 2018 financial year. As a result, as of the financial year 2018 end, the Group decided to take an impairment of USD 72 million on Nyrstar reducing the value of its equity investment in the company to USD 35 million. For the full year 2018, Nyrstar's underlying EBITDA was down 52 per cent. compared to 2017. Moreover, the company suffered from its capital structure, with a net debt at the end of 2018 at EUR 1,643 million, i.e. 49 per cent. higher compared to the end of 2017.

Thereafter, in light of the deterioration in revenues and cash flow that were experienced in the fourth quarter of 2018 and the first half of 2019, Nyrstar adopted a number of measures to address trading and short term liquidity challenges, including a review of its capital structure. The purpose was to explore the various options available to address the upcoming debt maturities in mid-late 2019. However, the company was burdened with an unsustainably heavy debt load due to overexpansion and encountered increasing financial difficulties. The significant deterioration of operational and financial performance lead to a loss of market confidence and available liquidity and necessitated a fundamental capital restructuring.

The restructuring involved many financial stakeholders. The main goal of this restructuring was to deliver a viable financial structure for Nyrstar business going forward. After several months of negotiation, the scheme of arrangement was sanctioned by the English Courts on 26 July and the restructuring became effective as at 31 July 2019. As a result, the Group became 98 per cent. owner of the holding company of the operating business of Nyrstar, now a non-listed company consolidated within the Group's balance sheet.

As a part of the restructuring and in exchange for the discharge of the Nyrstar's obligations under its previous outstanding bonds and convertible notes, the Group provided to the Nyrstar's bondholders and convertible noteholders a pro rata share of each of the following instruments: (i) EUR 262.5 million perpetual resettable step-up subordinated securities issued by TGPL; (ii) USD 88 million guaranteed senior notes issued by TSFA; and (iii) USD 251 million zero coupon commodity linked instruments guaranteed by the Group's entities (TPTE, TTLLC and TGPL).

Nyrstar also negotiated long-term bank financing with its bank creditors, including the reinstatement of financing facilities and completion of a USD 160 million new money facility, to ensure sufficient liquidity resources to operate the company on a long-term basis and permit higher smelter utilisation rates. The restructuring strengthened Nyrstar's balance sheet with a material reduction of its indebtedness considering the haircut on banks lines and investors notes. External liabilities reduced from over USD 3.1 billion pre-restructuring to c. USD 1.0 billion post-restructuring, considering the fact that the three bonds were restructured and reinstated at the level of the Group (outside the Nyrstar perimeter). Noting that the amount of debt post restructuring excludes Port Pirie's perpetual debt that was repaid in November 2019.

As a result of this restructuring, the Group wrote-off its remaining equity holding in Nyrstar N.V and other impairments which totalled USD 72 million as at 30 September 2019. The consolidation of Nyrstar was relatively neutral to the Group's financial ratios, thanks to the new capital structure (which included the issuance by the Group of the EUR 262.5 million perpetual bond).

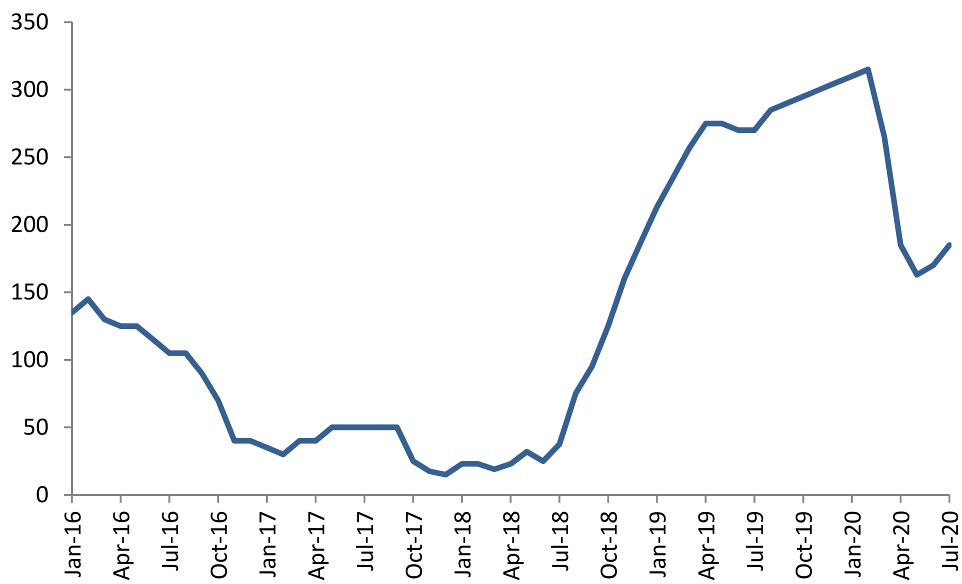
Positive market fundamentals

The Group acquired the operating assets of Nyrstar, as part of the restructuring, with a view to avoiding Nyrstar's insolvency and to protect its original investment, having determined that its global industrial multi-metal business is complementary to the existing trading activities of the Group.

The Group sees significant potential in the company, which benefits from world class facilities and a market leading position in zinc and lead and which should be well positioned for growth following the completion of the redevelopment of Port Pirie in Australia, alongside other operational improvements across the zinc smelters.

The Group's support to Nyrstar is first and foremost driven by a positive outlook for zinc smelting which should support the improvement in the Nyrstar's profitability. It is worth noting the conducive market backdrop with a significant increase of spot Zinc TCs that have climbed to more than 10-year highs, from a low of USD 20/tonne early 2018 to more than USD 300/tonne in January 2020, improving operational profit. The recent drop in TCs is a direct result of the Covid-19 pandemic, with a significant drop in refined metal's demand following quarantine measures implemented in China early 2020. TCs have now stabilised, around the USD 165-185/tonne level, as of May/July 2020, reflecting the strong restart of the Chinese economy.

ZINC TREATMENT CHARGES: JAN. 2016 – JULY 2020 (USD/TONNE)



Source: Wood Mackenzie

Zinc TCs recovery in 2018 is explained by a combination of rising mine supply and limited smelter capacity. The reduction of smelting capacity has notably been explained by a radical shift in the environmental policy championed by China as part of their new 2020 action plan for air pollution. Zinc smelting is less environmentally friendly than copper smelting because of larger proportions of noxious fumes and lead as by-product. Chinese authorities implemented a reduction of zinc smelting capacity in the country by introducing more cumbersome rules for smelters to operate. As a result, a number of zinc smelters in China were forced to shut down or significantly reduce their production.

Beyond this, other factors such as underlying metals prices, foreign exchange rates, lower interest rates (given the company's ongoing working capital requirements) are all currently at attractive levels for this business. The Group has taken advantage of this and implemented a risk management programme, hedging some key macro parameters in order to provide cash flow stability.

Nyrstar restructuring is well underway

As the change of ownership took effect, the Group appointed Daniel Vanin, a seasoned company executive with 40 years' experience in the metals industry, including leadership of mining and smelter development projects, as CEO of Nyrstar's operational business. Other senior appointments followed, including a new CFO, Karl Söderberg, who has more than 20 years of experience in the mining and metals industry. The new management team is composed of a mix of top industry professionals at the Group and Nyrstar, and former employees of the Group.

Nyrstar's management has a strategy aimed at positioning the business for a sustainable future as a leading metals processing business. Through its deep market insight and unique processing capabilities, Nyrstar aims to generate superior returns by extracting the maximum value inherent in the mineral resources and by-products it processes.

To realise its strategy, management has determined the following strategic priorities:

- Maintain Nyrstar's strong safety performance by improving visible safety leadership;
- Optimise the zinc smelters to deliver their full potential, underpinned by operational stability;
- Optimise the North American zinc mines to deliver their full potential;
- Ramp-up the Port Pirie redevelopment to deliver the guided earnings uplift; and
- Maintain a strong balance sheet with an appropriate maturity and liquidity profile.

Nyrstar's headquarters have now been relocated to be more aligned with operations at the Budel smelter (and within two hours of Balen and Auby). This relocation would also permit a significant overhead cost reduction. The management is implementing a more decentralised approach, and Nyrstar is being carved into three distinct operating regions, Europe, Australia and North America, each reporting to headquarters on its own profitability. The intention is to drive greater accountability and focus on profit margins.

Nyrstar will be one of the key areas of focus of the Group for 2020. Now that the company has been fully integrated into the Group, it will benefit from the Group's financial, commercial and technical expertise; together with a stronger balance sheet and a more serviceable level of debt going forward. Nyrstar is leveraging the Group's trading teams and best practice in terms of sourcing concentrates and marketing refined metal output and refined products.

In terms of operation, Nyrstar will focus on maximizing capacity utilization at each smelter and creating greater efficiencies in logistics, procurement and marketing. Capital investment is now being refocused on adapting smelters to be able to process and remove impurities from lower-grade concentrates and support strong increase in availability by replacing or upgrading non-performing equipment. The company is also focusing on waste creation reduction to improve environmental performance.

Regarding the mines, the Group is reviewing mining cost operations, putting some of the higher cost operations such as the Canadian Langlois mine on care and maintenance, whilst ramping up production in others such as the Myra Falls mine in Canada.

Galena Asset Management

Galena is the private investment arm of the Group, which has been providing investors with specialised alternative investment solutions in the energy, metals and minerals space through Private Equity Funds and Private Investments since 2003. Galena's strategy is to identify mispriced assets that have a strong potential for growth globally, relying on the Group's technical, commercial and financial resources to extract maximum value whilst managing the downside risk. The company has been regulated since 2003.

The Galena Private Equity Resources Fund raised USD 400 million in 2013 to invest in the equity and debt of metals and mining companies, of which, the Group has committed USD 100 million in the fund pari-passu to external investors. The fund became fully invested in 2017, holding positions in a number of assets in the Democratic Republic of Congo (Mawson West copper mine), the U.S. (bituminous coal producer Wolverine Fuels) and Finland (zinc, nickel and cobalt producer Terrafame). A successor fund was established in 2018, Terrafame II Investment Vehicle, to undertake a second investment in Terrafame, with the aim of adding a new production unit for nickel sulphate, a product in growing demand for use in batteries for electric vehicles. This fund closed with investment of USD 225 million during 2019.

In addition, in November 2018, the Galena Multistrategy Fund was established with an initial allocation of USD 45 million to invest in liquid, commodity-related strategies across multiple asset classes.

Looking forward, Galena continues to prospect for suitable resource investments offering strong underlying asset value and the opportunity to apply management and financial capabilities from the wider Group. Galena is regulated by the Swiss Financial Market Supervisory Authority (FINMA) and is carefully monitored by its own dedicated internal compliance department and supported by an external compliance consultant.

Terrafame

In February 2017, Galena Private Equity announced a 15.5 per cent. stake in Terrafame, a Finnish nickel, cobalt and zinc miner, via a EUR 75 million investment and a EUR 75 million trade finance loan. The operation has a large mineral resource of almost 2 billion tonnes, and mine life based on reserves of approximately 20 years. As part of the transaction, Galena took 2 out of 7 board seats for greater oversight and performance management, while the Group was granted the offtake of 100 per cent. of nickel precipitates and 80 per cent. of zinc precipitates produced over the next seven years. In November 2017, Galena increased its stake in Terrafame to 28.7 per cent. via a USD 100 million equity investment and additional funding package was announced to support the investment in a processing plant that will produce nickel and cobalt sulphate for use in electric batteries. This second investment was channelled through a USD 225 million special purpose vehicle, separate from the Private Equity Resources Fund. The ramp-up of production at Terrafame proceeded according to plan in 2018 and a feasibility study was concluded on the nickel sulphate plant. Also, at the time, the Group and Terrafame agreed to extend the offtake agreement concerning the zinc sulphide precipitates to 2027 and negotiated new commercial arrangements for future nickel and cobalt sulphate products. In 2019, metals production reached budget levels and the construction of the nickel and cobalt sulphate production unit started according to plan with a target delivery in 2021.

The Group's Capital Expenditure and Long-Term Equity Investment Programme

The Group's capital expenditure and long-term equity investment programme ("**Capex**") is mostly related to infrastructure projects within the Group’s industrial asset divisions (i.e. Impala Terminals, the Mining Group and, starting in 2019, Nyrstar), but also, more recently, increasingly in the form of joint ventures and partnerships including some that are specifically related to the development of the trading business. The Group’s Capex is largely of a discretionary nature, providing visibility on the Group’s liquidity requirements.

The Group has invested significant resources to develop its physical assets portfolio over the years. The Group’s strong performance and solid track record have helped open up new opportunities that might not be available to an entity of a smaller size or with a shorter track record. The assets often contribute not only on a standalone basis to the Group’s earning potential, but also offer important synergies with the Group’s trading activities, creating opportunities that support business development. These divisions, enable the Group is able to generate stable and recurring revenues irrespective of prevailing market conditions.

The Group’s Capex is executed and monitored in accordance with four core principles:

- A favourable assessment of the standalone profitability of each investment, meeting internal return on investment hurdles;
- Beyond a baseline of maintenance capital expenditure, certain other elements of planned capital expenditure are flexible and could be deferred if necessary in order to smooth the Group’s liquidity requirements. This is particularly true for investments made over several phases and expansionary capital expenditure which can be considered discretionary and uncommitted;
- Over time, Capex has a positive impact on the EBITDA of the Group’s industrial businesses resulting from productivity gains, increased volumes and synergies. The speed at which Capex is expected to turn into cash flows is also an important consideration; and
- Maintaining the Group’s credit standing with unsecured lenders is achieved by building value in the long run and managing the Group’s business and financial profile in a manner consistent with that of an investment grade company. There is management oversight over the Group’s Capex plan, ensuring that the impact of such spending would not compromise the compliance with the company’s financial covenants.

Investments in fixed assets and equity investments can be monetised and generate liquidity for the Group. The Group has demonstrated over the years its ability to make divestments. For instance, this has included the sale of (i) mining assets (Volcan, Anvil, Tiger, CMC and 50 per cent. of MATSA), (ii) equity investments (Corpus Christi Holdings, Chinalco Mining, Mexican Tuxpan pipeline), (iii) portions of its stake in Puma Energy in 2011 and 2013 to existing minority stakeholders and (iv) some of Impala Terminals’ logistics assets to a newly formed joint venture (Simba JV). These sales have generated substantial cash flows and profits for the Group and validate the Group’s strategy of investing in industrial and logistical assets to support its trading business and generate new revenue streams. The

transactions also demonstrate the Group's rigorous approach to managing its portfolio of asset investments, using capital in a disciplined manner and releasing value when the opportunity arises to recycle capital into new projects with a view to creating further profitable growth.

In the financial year 2016, the Group reached the end of an intensive cycle of investment in industrial and logistical assets and accordingly booked a reduced level of Capex. The Group's Capex (net of divestments) amounted to USD 285 million in the financial year 2019, and USD 95 million and USD 412 million in the financial year 2018 and the financial year 2017, respectively – in each case, well within the stated budget of USD 500 million. The Group expects Capex to continue at or around this level in the near future. The Group will continue to invest in assets that offer opportunities, where appropriate, firstly in the form of joint ventures and partnerships. Indeed, the Group seeks to expand its business and trading flows with a more partnership oriented growth model, as opposed to the full asset ownership model that had been pursued in the past.

Similar to 2018, property, plant and equipment *("**PPE**")* expenditures were limited in 2019, with main items being the purchase of scrubbers and shipping equipment at a cost of USD 28 million, the construction in progress of a splitter unit (USD 32 million) and a new storage facility (USD 18 million) in Mexico, and the construction in progress of a new terminal facility in North America at a cost of USD 12 million. The significant increase in PPE over the year (USD 1.96 billion) related to the acquisition of 98 per cent. of the operating business of Nyrstar in July 2019 following a financial restructuring agreement with the company's creditors and bondholders. In relation to this transaction, the Group also recognised a limited goodwill of USD 42 million in its intangible assets, which comprises the value of expected synergies arising from the acquisition.

Additions to equity-accounted investees were also limited during the financial year 2019, amounting to USD 86 million and consisting mainly of additional investments in Nayara Energy (USD 42 million) and an additional capital contribution in PSB (USD 9 million). Finally, the increase in 'Other investments' mostly relates to (i) the investment in Frontline shares of (USD 126 million) and Scorpio shares (USD 163 million), and subsequent fair value revaluation of USD 29 million – following the sale of 29 oil tankers to these companies – and (ii) investments in Galena Multi Strategy fund and Galena Private Equity Resources Investment fund for a total of USD 101 million.

Industry Overview

Sections below "Oil Market" and "Metals and Minerals Market" provide an industry overview, for both Oil and Metals and Minerals, respectively, until 2019 calendar year-end. Please refer to the below "Recent Update" section for some additional comments on recent market developments.

Recent Update

The onset of the COVID-19 pandemic in the first two months of 2020 created a global economic and financial shock the like of which had not been seen in nearly one hundred years. The resulting dislocations of economic activity and trade were a severe test for global commodity markets. For the Group, these dislocations were an opportunity to demonstrate the relevance and resilience of its services to clients, and its capacity to help balance commodities supply and demand.

The pandemic, government measures to curb its spread and the consequent sharp reduction in global economic activity impacted almost all the commodities the Group trades - either on the supply side, the demand side or, in most cases, a combination of the two. In the oil market, we saw, for a time, prices and curves moving from backwardation (where forward prices are lower than spot prices) to contango (the reverse) and back again. Volatility broke all records.

Physical commodity trading firms are structured to deal with volatile conditions. The role of commodity traders is to address and rectify disconnects between supply and demand in global commodities markets, and the past few months have seen the largest-ever disconnect in the oil market, as a glut in supply collided with a drastic drop in demand. Those firms that operate on a global scale, with access to infrastructure, ample credit and a broad network of counterparties, were able to stabilise the market by storing various commodities, and then working to bring those inventories back into the market as demand has picked up.

Volatile conditions have continued, and although China and large parts of Europe appear to have been successful in bringing Covid-19 cases under relative control, the rest of the world is still in the grips of a global pandemic. Major markets are at ever-increasing risk from the spread of the virus, on both the demand and supply sides. As of the date of this Base Prospectus, the problem appears particularly acute in Brazil, Chile and other parts of Latin America, threatening mine closures and supply chain disruptions on the metals side. India also remains very much in the throes of worsening case growth and hospitalisation rates. Further, new cases have grown in the United States and states are having to pause or even rollback their re-openings, which is dampening enthusiasm for a rapid economic recovery.

Oil Markets

The oil market has experienced a change of fortunes that is truly extraordinary. In calendar 2019, average crude oil prices were USD 64.15 per barrel (Brent) and USD 57.04 per barrel (WTI), about 10 per cent. below their averages for 2018. But the market expected a somewhat stronger 2020 on the back of the apparent truce in the US-China trade conflict, OPEC+ production cuts and other relatively positive news. Instead, prices in May/June were about 50 per cent. below 2019 levels and until then the year-to-date average was about USD 20 below expectations.

The market started to be affected as China began exhibiting signs of a new viral pandemic gripping the country. A week after the city of Wuhan went into lockdown on 23 January 2020, prices had fallen 15 per cent. from their pre-quarantine peak. Chinese refining runs dropped by approximately 3.5 million barrels per day, close to 25 per cent. By mid-February, as cases proliferated in South Korea, Iran and Italy, fears grew over global demand and prices dropped again by 20 per cent. in a week. Prices continued to decrease when Saudi Arabia, Russia and other members of OPEC+ abandoned production quotas and embarked on a battle for market share. The day after that decision, prices saw their second-largest one day drop ever with prices falling by almost a third at the market open.

The advent of quarantines and lockdowns in Europe and the US then took an unprecedented hammer to demand. Normally in a crisis it is a slowdown in economic activity that creates a drag on oil demand; this time, oil demand was hit first, as movement literally came to a halt. Demand for jet fuel suffered especially, with 80 per cent. or more of the market disappearing virtually overnight as airlines grounded their fleets. Gasoline use also collapsed in many areas. The US, which accounts for approximately one-third of global gasoline demand, saw demand fall by 45 per cent., approximately 4.5 million barrels per day. Diesel use did not fall by quite as much but was also clearly impacted by the drop in trade and manufacturing, with global demand off by 25-30 per cent.

As excess production met collapsing demand, storage began filling up at previously unimagined rates and market players started booking oil tankers to hold unwanted barrels. So-called floating storage is significantly more expensive than holding oil onshore and is economically unviable in all but the most extreme circumstances. Remarkably, on this occasion, floating storage was activated well before onshore storage tanks were actually full. Rather, they were “virtually full” in that the space had already been booked and was not accessible to new players. The result was the previously unthinkable emergence of negative crude prices. While the fall below zero and the consequent rapid curtailment of production occurred after our fiscal six-month period closed, the conditions were already building at the end of March.

Since the close of the first half of calendar 2020, the Group has seen an historic pact between OPEC+ (OPEC, Russia, Kazakhstan and some other smaller producers) and G20 members including Norway, Brazil and Mexico, which slashed production by at least 10 mbpd, in an attempt to bring balance back to an oil market that was oversupplied by a record amount. Those production cuts, along with a rebound in demand as economies re-opened, have led to oil prices effectively doubling from 31 March 2020, moving from USD 22.7/barrel to a high of USD 43.3/bbl in early July.

However, along the way, the Group experienced something wholly unknown in modern oil markets: negative prices for a major global benchmark. As a result of the unprecedented mismatch between demand and supply, with the former falling precipitously as shutdowns and quarantines took effect, and the latter continued at historically high levels until the OPEC+ and G20 deal, storage began to fill up at a rapid rate. However, even before physical storage reached capacity, market players began to secure all available storage in anticipation of the wave of excess oil that was making its inexorable way through the supply chain. This race for storage space extended not only to onshore tanks but also to ships, as tankers were turned into floating storage. As such, it appeared that tanks at Cushing, the delivery point for

physical settlement of WTI crude barrels, were full, meaning that any further barrels brought in would have no home and would need to be moved elsewhere. That is indeed what happened, as the low price print of -USD37.6/bbl yielded economics that made it feasible for physical traders, including the Group, to move the excess crude away from Cushing via a range of means (e.g. rail, truck or pipeline).

Three months of supply curtailments, by not only the OPEC+/G20 group, but also US and Canadian producers have helped stem the flow on one side of the equation, pushing prices significantly higher. However, the key risk remains demand, as the unfolding second wave of shutdowns in the US (noting that the country seems to have never exited the first wave of the virus) and the ongoing issues in ex-China Emerging Markets mean that the demand recovery can already be seen faltering. This is not due so much to official government restrictions, but rather self-quarantining by people concerned about exposure. We can see this in high-frequency data including restaurant bookings, retail foot traffic and road congestion. It is too early to tell whether this will lead to a repeat of widespread shutdowns and therefore a hard stop on transportation in key economies, including the largest oil consumer in the world, but such a scenario is rising in probability. If it comes to pass, we should expect to see a return to the price levels seen in April (although not into negative territory) and also of the volatility experienced earlier as well.

Metals Markets

Metals markets followed a different path, but were also heavily affected, not least because China consumes about 50 per cent. of most major metals, and in some cases much more. In the oil market, by contrast, China accounts for less than 15 percent of global demand. A major slowdown in China has an outsize impact on metals demand, so metals prices reacted earlier than oil. Similarly, as China started to emerge from COVID-19 quarantine much sooner than other regions, prices rebounded relatively quickly. One of the key themes in metals markets has been that the supply side has been impacted as much as the demand side, and more in some cases. This duality has helped balance these markets much more quickly than oil markets.

Copper had a particularly volatile ride. As the virus spread in China, prices plummeted by almost USD 1,000 per tonne in two weeks (13 per cent.). The closure of auto plants and other manufacturing facilities was a problem, but there were issues on the supply side as well. Given the restrictions on movement, smelters were unable to move the sulphuric acid that is a by-product of smelting. At the same time, copper mines were hit hard by the virus, particularly in Latin America, with about four million tonnes per annum of production capacity offline at the end of March.

As demand picked up with a resumption of Chinese economic activity, inventories were drawn down. By the end of March, prices had rebounded by more than seven per cent. to just below USD 5,000 per tonne. This more positive outlook looks set to continue, with demand outpacing supply, especially given the major stimulus programmes being rolled out across the globe, including infrastructure, grid buildout, 5G rollout and electric vehicles. One major risk to this positive outlook for copper and the other metals is the possible resurgence of trade issues between the US and China.

Metals markets have not been quite as volatile since the end of the first half of 2020; in fact, they have generally been on a steady march upwards. This is in no small part due to the fact that China has recovered quite well from the effects of the virus, helped along by significant monetary and fiscal support from the government. The resurgence of construction and real estate sales, accompanied by strong household appliance demand and recovering auto sales, has meant that demand for key industrial metals has been relatively strong, at least in China. Outside of China, the transportation sector has been weak, particularly in the US and to a lesser extent Europe. However, new stimulus measures supporting increased electrification and a concomitant building out of the grid, a broad based push to increase electrical vehicle adoption, 5G network rollout, housing redevelopment to improve efficiency and other myriad measures have seen copper in particular see very strong demand, with zinc following not too far behind. Copper and zinc have also seen significant supply side curtailments, but unlike the oil markets, these have not generally been voluntary, but rather the result of Covid-19 clusters appearing in key mines. Aluminium and nickel, on the other hand, have seen significant demand weakness in both the transportation (aluminium) and consumer (nickel) sectors, but also no supply side disruptions of note, and as a result remain potentially oversupplied.

Overall, the unprecedented monetary measures that central banks globally have enacted during this crisis have helped keep a floor under risk assets and thus boosted global outlooks, but now we move into an uncertain period, similar to the one we saw during the depths of the pandemic. As such, those firms that

can help address historic market dislocations, can bridge unprecedented supply-demand gaps, and can mobilize financial heft and logistics infrastructure, both with alacrity and on a global scale, will be well placed in these times.

Oil Market

Crude Oil

Crude oil is a major commodity, traded on the international markets. There are numerous derivative products obtained from the processing of crude oil in refineries. These refined products are usable and tradable too. Such refined products from crude oil refining include naphtha, gasoline, distillates, fuel oil and bitumen. Gasoline and distillates are the most widely traded refined products, in terms of volumes traded.

The physical global supply and demand of crude oil determine its long-term price, like all commodities. However, given crude oil's role as one of the world's key economic drivers, its short-term price can become especially volatile due to geopolitical events, financial positioning, macro-economic developments and regulatory changes. These events can quickly shift the short-term supply and demand fundamentals or stroke fear into them causing a sharp price response.

The physical supply of crude oil is born from exploration and production projects that are executed by national energy companies, like Saudi Aramco, or private enterprise, which can be independent or integrated energy companies, like British Petroleum (BP). Oil producing nations are often differentiated as being part of the Organisation of the Petroleum Exporting Countries (OPEC) or not (non-OPEC). In 2018, OPEC countries held approximately 72 per cent. of the world's proven oil reserves, but they only accounted for around 42 per cent. of the world's oil production and possessed less than 15 per cent. of the refining capacity.

Although there is no consolidated data available regarding total volumes handled by traders, the Group's market experience approximates that between 50 to 60 mbpd are 'freely' traded, which equates to about half of the total market. These are volumes that the Group considers to be on the 'tradable market', or volumes that are not handled by producers directly to consumers. The tradable market holds significant opportunities for companies engaged in the physical trading of oil, such as the Group, Vitol and Glencore. Over the financial year 2019, the Group traded an average of 6.1 mbpd of physical oil, which equates to c. 7-10% of the market share of these tradable barrels.

There exists hundreds of different varieties or "grades" of crude oil, which are valued differently by refiners due to their chemical compositions and yields of refined products from the refining process. The pricing of the many varieties of crude oil amongst buyers and sellers is done on the basis premiums or discounts to a much smaller number of "benchmark" crude oils. Benchmark crude oils include Brent , Dubai, and West Texas Intermediate ("**WTI**"). Brent crude is estimated to price two thirds of internationally traded crude oil supplies, which is why a major international event is typically reflected in the price of Brent futures in the short-term. Dubai crude is used as a benchmark to price crude oils sold from the Arab Gulf into Asia. WTI is the benchmark for sales into the United States and is often compared to the price of Brent as a price differential. Most recently, the Shanghai crude futures were introduced to represent an Asian benchmark. OPEC produces its own benchmark price based on a basket of members' crudes as well as Mexico's Isthmus crude.

The vast majority of crude oil is refined into various fuel products, and a small fraction is used to produce chemicals, which are the basis for the petrochemical industry, which includes plastics, pharmaceuticals and cosmetics.

Oil Products

Global oil refined products ("**liquids**") demand growth generally trends with global economic growth given its role in the industrial, construction, and transportation sectors. Looking at the past twenty years, this trend has mainly been upwards except for the years of 2008 and 2009 when consumption of energy fell because of the global economic recession. Even then, the upward trend quickly resumed in the years that followed those two years of liquids demand contraction. A sizeable boost to oil liquids demand occurred in the years that followed 2015 as lower priced motor fuels benefited consumers in the OECD countries, plus China and India. This was a result of a sharp fall in the price of crude oil that began in late

2014, which trickled down to the prices of refined products, particularly gasoline and diesel. Since the lows in early 2016, a slow rise in oil price has occurred, but refined product demand growth continued while the world witnessed robust in-sync economic growth in 2016 and 2017 headlined by OECD countries. However, as central banks responded to economic strength with higher interest rates and oil prices climbed higher on tighter supply and demand balances, fears of refined product demand erosion started to arrive in 2018. The addition of a trade war narrative between the United States and China escalated the fears of economic decline quicker than originally surmised by the market. Now, the ripples of weakness throughout the global economy continue, which are amplified by the trade war currently in stalemate between the United States and China.

The response of oil liquids growth from global GDP growth has weakened, reflecting the increased use of alternative fuel types and improved efficiency. Oil liquids consumption increased by approximately 1.4 per cent. (compounded annually) since 2004, compared with a Purchasing Power Parity weighted increase in global GDP of 5.9 per cent. Over recent years, a 1 per cent. increase in global GDP has resulted in oil liquids consumption increase of approximately 200,000 barrels per day. Growth for oil liquids demand is now concentrated in non-OECD countries, where the growth and market share has overtaken OECD countries and will continue to do so.

Refining Capacity and Other Fundamental Factors

A clear view on refining capacity helps to shape the forward view on crude oil demand and refined oil products supply. For example, refining capacity becomes a bottleneck when crude supply is sufficient, but oil products demand outstrips the production capacity able to supply oil products demand. The historic pattern has been that when demand for refined products increases at a rate greater than additions in refining capacity, refining margins widen to incentivise additional refining capacity growth. Conversely, when additions in refining capacity exceed the growth rate in demand for refined products, refining margins contract to incentivise capacity rationalisation.

Other oil market fundamental factors include environmental seasonality and weather events, which can affect price similar to geopolitical risks given the unpredictability of such events. Cold weather regions experience a boost in demand for heating products. Surprise weather events, like hurricanes, can greatly affect both the production of crude oil and supply of refined products simultaneously, as offshore rigs and refineries need to be "shut in" in the Gulf of Mexico, creating high price volatility.

On a different scale, factors such as the U.S. Strategic Petroleum Reserve increasing or releasing stockpiles can influence the market within the North American region and beyond.

Although the market for producers and refiners is consolidated, the range of consumers is broad and fragmented. Consumers of products vary from automobile users to large petrochemical companies, which transform crude and refined products into sophisticated derivate such as cosmetics. The oil market is also unique in that the versatility of uses and characteristics of primary refined products allows industrial users to differentiate between their usage of crude and refined products, mainly in terms of price and capacity to produce further refined derivatives.

The Group benefits from this highly volatile price environment by being able to make trading transactions using its arbitrage expertise, geographical reach, storage blending capabilities and freight options. In addition, the use of financial derivatives provides the Group with the means to enhance opportunities in the market while hedging against outright price risk.

Crude Oil Price Analysis

Crude oil prices had been relatively stable in percentage terms from 2012 to the first half of 2014. However, a notable decline ensued in the second half of 2014. Brent fell from USD 115/bbl in June to around USD 55/bbl in December. Offline production in Libya and Iran masked rapid production growth in North America and other regional gains for some time. However, it was Libya increasing its exports in late 2014, in combination with the OPEC's uncharacteristic decision in late November to not limit production, which kicked off the rapid sell-off.

Prices recovered some 25 per cent. from early February until May 2015. This led to significant forward hedging by producers, which had been able to bring their costs down such that they were profitable at those levels. Producer hedging meant that production that was previously at threat of being turned off was

able to keep going, adding supplies to the market, which put significant downward pressure on prices. By December 2015, Brent fell to USD 36.1/bbl, its lowest point in the 7-year period post-financial crisis, following news that OPEC would continue producing at will in order to defend market share and push out higher cost producers such as the US.

The price environment worsened following the removal of sanctions on Iran, which allowed more supply to flow into the market. It was during this period that there was the removal of the ban on US crude oil exports, which would play a major factor later.

In early 2016, the price of Brent crude oil dropped to new lows (of USD 27.88/bbl in late January), levels last seen in November 2003. This price volatility and ensuing fall was detrimental to producers. However, traders such as the Group, can play a vital role in addressing temporary market imbalances by storing surplus commodities and producing a profit in the process.

Since the beginning of 2016, when oil prices fell to the upper USD 20s/bbl range, Brent progressively increased upwards for two years. This was mainly the result of a deal announced between OPEC members and non-OPEC producers in late 2016 to cut 1.7 mbpd of production. The main drivers of this cut were Saudi Arabia, Kuwait, UAE, Iraq, and Russia (non-OPEC). OPEC members Nigeria, Libya, and Iran all increased their volumes during this time, offsetting the principal cutters. It was Venezuela, which deteriorated because of a failing socio-political environment, that tipped the scales as its production fell over 1.5 mbpd in this two-year span.

By mid-2018, when crude healthily recovered to USD 75/bbl, OPEC+ (OPEC plus Russia and others) countries decided to reverse course and increase production. This decision was driven in large part by expectations that U.S. sanctions would reduce Iranian oil exports by an amount that would significantly tighten global supplies if OPEC+ continued with their cut. At first, there was no significant market reaction, but strong rhetoric by the U.S. administration in the lead up to the return of Iranian sanctions spurred a crude oil rally to over USD 85/bbl. The timing of this rally coincided unfavourably with the U.S. midterm elections to occur in early November 2018 as gasoline prices rose to multi year highs. It was at this peak price that global refinery turnarounds and trade war fears weighed on crude oil demand. On the supply side, OPEC+ produced and exported crude oil quantities not seen since December 2016, while US reached record production of over 11 mbpd. Crude oil price fell 40% in two months (from October to December) to USD 50.8/bbl as crude oil stocks continuously built during this period and technical trading exacerbated the downward move. In 2018, the U.S. Permian Basin alone saw growth of 1.2 mbpd in 2018, meaning that if it were a standalone country, it would be the world's eighth largest producer.

The extreme price sell-off forced OPEC+ to revisit their strategy in December 2018 and agreed once again to cut oil production by 1.2 mbpd. This strategy helped crude oil gently climb back to a high of USD 72.8/bbl in mid-April. However, fears of economic concerns from the effects of the US and China trade war quickly sent crude oil back below USD 60/bbl in mid-2019. Nevertheless, this price reaction was relatively dull for such geopolitically significant events. It became evident that the robust US production growth, in addition to a breakdown in talks between the US and China over a trade deal would dominate price action through the summer of 2019 to a range of about USD 60/bbl.

However, on 14 September 2019, the 7 million barrel per day oil processing facility in Abqaiq, Saudi Arabia was attacked by drone, essentially shutting off c. 7% of global oil production. Oil price briefly spiked 20%, or nearly USD 11/bbl, at market open marking its biggest jump in 28 years' time before settling 10% higher, or USD 6/bbl, at around USD 66/bbl. It was a significant moment for Saudi Aramco as it was in the process of its launching the company's IPO and the world watched as it quickly handled the situation given the magnitude of the event shifting physical crude oil cargoes and restarting production in just weeks' time. Crude within a month's time fell back to levels before the event took place as the main themes of trade war and US production growth hampered a constructive flat price view, knocking it back below USD 60/bbl again. As the year of 2019 closed, the US and China trade talks took a positive turn with an announcement of a Phase 1 deal and crude oil traded back to around USD 65/bbl.

Shale Revolution Gas Side Effects and Opportunities

In addition to crude oil, increased US shale gas production has had an obvious effect on natural gas market development. In previous years, the natural gas market had been regionally isolated as global transportation of gas proved both difficult and expensive. However, the natural gas production boom from

shale exploration has spurred recent infrastructure developments, quickly making the economics of global liquefied natural gas (LNG) trading increasingly attractive. The Group is well placed as the second largest physical global LNG trader in the world to take advantage of these opportunities as the US and other producing nations use their large reserves of shale gas to produce more liquefied products for export purposes.

As one of the main structural changes over the past decade, increased natural gas production has garnered greater attention as an alternative fuel source to coal for supplementing world energy demands. The Group continues to believe coal is likely to remain essential to worldwide energy consumption for the next decade. This is especially driven by the fact that drilling costs and associated capital expenditures for shale gas wells in China, the world's largest coal consumer, are too high to justify a quick move away from coal.

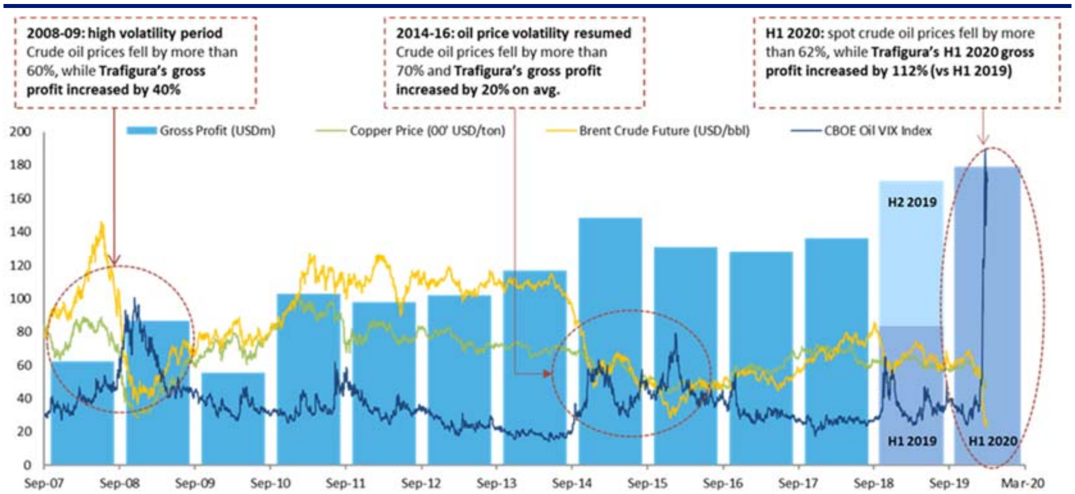
These developments suggest energy based commodity markets will remain dynamic going in the near future.

Analysis of the Impact of Declining Oil Prices on the Group

From September 2014 to September 2017, oil prices have declined by around 40 per cent. and there were points in 2015 when the scale of the fall was even greater. When oil prices hit a trough, history has shown that the energy industry's response is a flurry of mergers and acquisitions. Price crashes in the early 1980s and late 1990s sparked a wave of deal-making that reshaped the industry. A decline in the mid-2000s led the majors to pick up smaller producing companies. Previous consolidations took place after a prolonged slump in crude prices and often during a period of weak energy-stock market valuations. Bear in mind that the Group is not active in oil exploration and production.

Historically, declines in commodity prices have had almost no adverse effect on the way the Group conducts its day-to-day business. The Group hedges the risk embedded in its physical trade flows, therefore, commodity price decreases have no impact on the company's profitability. In fact, the Group's business model benefits from volatility in commodities markets. The Group has stabilised, if not slightly grown, its traded oil and petroleum volumes since the financial year 2018, and generally delivered strong profit performances during volatile periods. This has been clearly demonstrated since the Group's inception, in particular through historic oil price crashes, 2008-09, 2014-15 and the first half of 2020, as shown in the chart below. Indeed, at times like these, the Group's expertise to solve disconnects in global markets between supply and demand become more relevant than ever.

RESILIENCE IN A VOLATILE COMMODITY MARKET



Source:
- Company information: Gross profit figures exclude Puma gross profit for all years
- Public market data (Bloomberg): Brent – Generic 1st Crude Oil future ('CO1 Comdty') // Copper – LME cash price ('LMCADY Comdty') // CBOE Crude Oil ETF Volatility Index ('OVX Index') measures

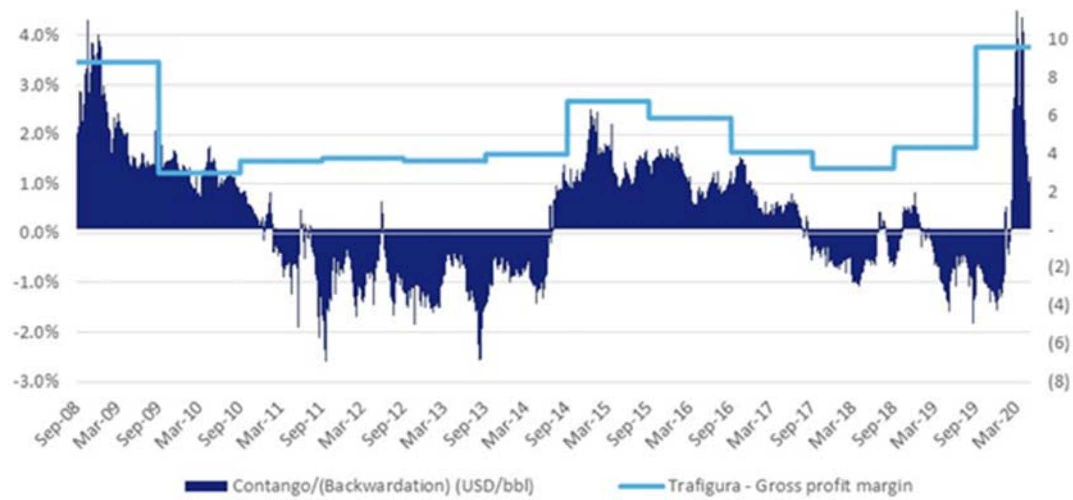
market's expectation of 30-day volatility of crude oil prices by applying the VIX® methodology to United States Oil Fund (USO) options spanning a wide range of strike price

Note: Only the first half of 2020 gross profit is included compared to previous annual totals; noting that gross profit for the first half of 2020 includes the impact of IFRS 16 amounting to +USD 481 million

The Impact of Contango and Backwardation

In a contango market, where forward prices are higher than current spot prices, the Group is able to buy and place cargoes in storage whilst selling the equivalent forward contract. As long as the cost of the transaction, which includes storage, insurance and financing, does not exceed the price differential between the forward and spot rates, the Group is able to lock in profit with very little risk. In 2018 and 2019, primarily driven by falling inventories and increased producer hedging activity, we have seen the global oil market forced into backwardation, i.e. when futures prices fall below the current spot price. In the scenario when a switch from contango to backwardation occurs, commodity traders often experience an impact on profit margins, as it takes time to unwind storage positions that had been attractive when forward prices were higher than spot. The below chart demonstrates the impact that the move from contango to backwardation, and vice versa, has had on the Group's gross profit margins over the last ten years.

THE IMPACT OF CONTANGO AND BACKWARDATION



Source: Public Market Data, Contango / (Backwardation) graph is calculated by subtracting CO1 (Generic 1st 'CO' Brent Future) from CO6 (Generic 6th 'CO' Brent Future). Gross profit figures exclude Puma Energy gross profit for all years

Metals and Minerals Market

Market Developments

Industrial metal prices have historically been volatile, reflecting the swings in the global economic cycle, often exacerbated by stocking and destocking cycles, supply-side changes and inflows and outflows of short-term and long-term speculative and investment flows. The key driver, however, remains the economic cycle and price movements which in recent years have reflected changes in both expectations and outturn growth.

Prices in the metals markets have seen similar levels of volatility to those seen in the oil markets, although metals have generally been slower than oil to react to weakness in China, the world's largest commodity market. From early 2015 until mid-year 2016, prices moved downward quite substantially before experiencing a surge similar to oil prices during 2017. As with oil, capacity has been ramping-up in recent years in the expectations of strong demand from China, only for that capacity to come on just as demand slowed. However, unlike in the oil market, metals producers reacted quickly to the lower price environment by announcing supply cuts in key metals. This has helped keep a floor under prices. As with oil, demand growth will have to do its part to help rebalance the market.

In 2018, global economic growth generally maintained its momentum, underpinning a decent year in terms of commodity demand growth. Despite rising interest rates, emerging market turmoil, geopolitical issues, a stronger US dollar and higher commodity prices, growth was above historic averages and was broad based across geographies and product types alike.

Growth in 2019 however was a different matter, as it was markedly less strong across commodities. The headwinds from the trade war between the US and China as well as lingering after-effects from the US Federal Reserve's tightening cycle over the previous years meant that demand globally slowed considerably. Global trade contracted for the first time since the 2008 global financial crisis, and vehicle sales, a significant contributor to demand across numerous commodities, fell sharply in every major market. Heading into 2020, the ceasefire in the trade war and the rolling back of some tariffs, combined with much looser monetary conditions globally in the form of low (or even negative in some places) rates means that demand should be stronger relative to last year.

Aluminium

LME 3 month forward aluminium prices fell rapidly towards the end of 2014, breaking through their average for the year of less than USD 1,900 per metric tonne (USD/MT) and continued to fall in 2015, reaching its lowest point in November below USD 1,450/MT, with the exception of a brief spike in May 2015 towards USD 2,000/MT. Prices stayed low in the early part of 2016, before beginning a sustained upward rally mid-year, along with the rest of the commodities complex. Prices averaged just under USD 2,000/MT in 2017, but saw a sharp rally in early 2018 to over USD 2500/MT as the result of sanctions being placed on Rusal in April 2018, one of the largest producers of aluminium in the world. Prices then steadily headed downward, trading below USD 2000/MT by the end of 2018 and reaching a low point around USD 1,700/MT during H2 2019.

In June 2014, market reacted strongly to the revelations of fraudulent metals practices at the Qingdao port, since China accounts for over 40 per cent. of primary aluminium consumption globally. The direct effect on the Group was not material, but market participants added additional processes and safeguards in place for their aluminium trading within China. In response to these issues across the aluminium market, including extended queues at some LME warehouses, the LME established new warehousing rules at the beginning of 2015. These rules have changed the market dynamics by subjecting warehouses with queues of over 50 days to strict load-in-load-out requirements, causing premiums to fall rapidly and sharply across the board.

New uses for aluminium, including in transportation and in high-voltage electricity grids, have meant that demand both inside and outside of China has been rising steadily, outperforming other base metals in 2015. Similarly in 2016, stronger vehicles sales in the US and Europe in particular contributed to this rising demand as companies such as Ford move their most popular models to aluminium-based designs.

China, however, moved from being the world's largest importer to being a growing exporter, as low-cost capacity built during the boom years continues to come online and add to global supplies, reversing the dynamic of the last decade to some extent. The shift left the market as a whole in surplus, which combined with significantly lower energy prices, brought prices down to the lowest levels since the global financial crisis. China began reducing aluminium capacity in late 2017, both in response to over-capacity concerns and also to target the atmospheric emissions from the sectors. The result was that the aluminium market began to tighten for the first time in many years, providing a floor for prices in 2018 and beyond.

The much anticipated environmental closures over the winter of 2017/2018 turned out to have very muted impact on overall production, resulting in a sell-off and a widening of the Chinese export arbitrage, as a solution was sought for winding down the large stock pile of metal built up in the country. Further disruption followed, with the US applying tariffs on the import of aluminium from March 2018, which sent US premiums soaring, and later applying sanctions on the largest shareholder of Russian smelting giant Rusal, which potentially could have left a significant gap in global supply.

Volatility came from raw materials as well, with the world's largest alumina refinery in Brazil having to curtail output following an environmental incident. While this put upward pressure on alumina prices, the raw material cost increase did not fully pass through to smelters, leading to margin contraction. This was felt in China in particular, where curtailed output finally allowed stocks to draw back towards more normalised levels.

Global demand for aluminium contracted in 2019, the first time in ten years this has happened. Weak demand from the automotive sector was primarily to blame, as car sales were weak in both China and Europe over the year. In the preceding several years, the automotive industry had been the largest contributor of demand growth in the aluminium industry. In 2020, car sales are expected to improve and aluminium demand in transport is expected to rise.

Looking forward, aluminium continues to see increased use in vehicle light-weighting and in transmission grid build-outs. Unusually, aluminium growth is beginning to be driven more by demand outside China rather than in it, providing a solid base for future growth.

Copper

In 2015, the copper price averaged approximately USD 5,500/MT, just less than 20 per cent. below its previous year average of approximately USD 6,830/MT. The year 2016 saw two distinct phases, with prices remaining around USD 4,700/MT for most of the year, before jumping up to average USD 5,600/MT after the US presidential election.

The steep change upward in prices hinged on hopes for increased infrastructure stimulus from the Trump administration. However, against the backdrop that the last few years had been a situation of oversupply due to increased production and the decline in Chinese demand growth rates, prices declined following the disappointment of the scale of the Trump administration stimulus.

The structural changes that China is experiencing as it moves from an investment-led model to a more consumer-based economy saw copper demand stagnate for most of 2015 in the world's biggest consumer of the metal. Electricity grid build-out in particular was much lower than expected in 2015, due in no small part to an ongoing corruption crackdown that appears to have stymied decision making. Furthermore, as the pace of China's urbanisation slows from breakneck to merely rapid, real estate activity slowed as well, leading to less demand for copper in housing. Over the medium term, the excess housing inventory in China should be absorbed, as workers continue to move from the countryside into cities. As inventories drop, construction activity should begin to pick up.

However, against this backdrop of structural slowing, the Chinese authorities put an unprecedented infusion of liquidity into the economy in 2016, amounting to over USD 3 trillion, with USD 1 trillion coming in the first quarter of 2016 alone. Economic activity was thus given a sharp stimulus. Industrial production, real estate activity and infrastructure development all rebounded sharply after the slumps in late 2014 and across 2015. The government then kept liquidity conditions loose throughout 2016 and 2017, allowing economic activity to rebound across the board, boosting demand for copper and other industrial materials.

Suppliers responded to the low price environment by announcing supply cutbacks and project delays which they hope will see them through to a more balanced market. Glencore in particular announced major cuts at the time, totalling some 400,000 MT, but others including Freeport McMoRan and First Quantum, followed suit as well. These cuts, combined with a general rebound in commodity prices due to the proposed infrastructure plan from the Trump administration, meant copper prices rebounded to trade above USD 6,000/MT in 2017. Copper demand in 2017 was mostly boosted by the recovery in Chinese real estate and by an accelerated build-out of the Chinese electricity grid.

Copper then started the 2018 fiscal year strongly, with prices rising to a high of USD 7,200/MT, a level not seen since 2014. The prices then dipped below USD 6,000/MT for a short time before recovering to between USD 6,200/MT and USD 6,400/MT. In 2018, despite concerns about slowing macro-economic trends demand remained healthy and import of cathode were strong. In June 2018, sentiment shifted as concern over the economic slowdown and the impact of deteriorating trade relations with the US led to broad sell-off in commodities.

Mine supply appeared to be tightening for most of 2018, with spot treatment and refining charges dropping to five-year lows in April. However, unexpected smelter outages and generally stronger mine supply led to the market softening into the summer months. On the mining side, expected disruptions due to labour disputes failed to materialise, allowing the concentrates side to stay fairly well supplied and mitigating some of the upside price risk.

In 2019, copper was driven by the trade war narrative, as prices rose from USD 5,700/MT at the start of the year to a high of just under USD 6,600/MT on the expectation of a possible Chinese stimulus effort to combat the trade war. However, the stimulus did not materialize, and instead the trade war escalated beginning in May. As a result, demand concerns came to the fore, and copper prices fell, reaching a low of around USD 5,600/MT in September. Prices began to recover along with the prospects for a deal on the trade war front, and the temporary resolution reached in December has pushed prices back towards USD 6,300/MT as expectations for more positive demand growth and likely tighter supply are painting a tighter market picture.

Lead

Lead finished 2014 at average yearly low of approximately USD 1,860/MT after peaking at USD 2,300/MT in July. Prices in 2015 averaged just under USD 1,800/MT, before seeing a steady upward climb to average USD 1,900/MT in 2016. In 2017, average price for lead has been above USD 2,200/MT. The main driver for the price rises was a reduction of primary production in China due to a combination of tight concentrates and environmental pressures. Meanwhile, local demand had grown by 2 per cent., primarily from the battery replacement sector. However, moving into 2018, LME prices eased from USD 2,590/MT in January to around USD 2,000/MT in September. In 2019, lead prices started and finished the year around USD 2,000/MT, reflecting a relatively balanced market.

In lead concentrates, the market transitioned from a tighter supply scenario in 2014 to a more balanced condition throughout 2015. The transition came as a result of the closure of the La Oroya smelter in Peru, which reduced competition for concentrate demand. In 2015, the lead concentrates market was impacted by the Chinese economic slowdown. After two years of stagnation, Chinese demand decreased year-on-year. Since Chinese consumption accounts for up to 70 per cent. of global lead concentrates demand, this led to a softer concentrate market. Similar market conditions to those experienced in 2015 were expected in 2016, with Chinese demand under pressure given financial constraints on consumers and increasing focus on environment impacts. However, lead rallied in 2016 along with other key commodities such as zinc and iron ore, as the expectation for demand growth on the back of a brighter macroeconomic picture boosted price outlooks and that rally continued into 2017 as mine supply constraints tightened the market.

In 2018, lead mine supply showed no sign of recovery after significant decreases in recent years, and the concentrates market remained tight. To add to the pressure, environmental inspections in China targeted secondary lead producers directly. The metal indeed falls within two major categories that face scrutiny from the central government: solid waste and heavy metal. This impacted smelters' ability to produce, while demand has remained strong, driven by replacement battery needs.

In 2019, market began the year with a very low stock base, particularly in China. Despite a relatively balanced market forecast, sporadic periods of tightness throughout the year were expected, particularly through the higher consumption season. As the year progressed, weak global consumption, exacerbated by Chinese vehicle sales that fell in 15 of the 16 months to September 2019, became the dominant factor, offsetting the unexpected supply disruption from the prolonged force majeure at Nyrstar's Port Pirie operation – which caused lead price to almost reach USD 2,300/MT late October. As a result, at year-end, the market remained balanced.

Zinc

The refined zinc market presented a difficult environment for trading in 2018, as supplies of both concentrates and refined metal remained tight for much of the year and refined price was backwardated, after showing strong performance in 2016 and 2017 with prices averaging around USD 2,700/MT. As the market tightened, prices surged to almost USD 3,600/MT in February 2018 but, from then on, supply recovered. By the end of September 2018, prices dropped all the way back to USD 2,500/MT. In 2019, zinc prices followed a similar trajectory as copper prices, rising in the early part of the year to over USD 2,900/MT before slumping on weak demand and trade war-related concerns, and falling down to USD

2,200/MT, the lowest levels since 2016. Unlike copper however, prices are yet to really recover and have continued to trade in a relatively narrow range, in the USD 2,300-2,400/MT level.

Concentrates supply had been constrained for two years as a result of the closure of the Century and Lisheen mines. However, as the year progressed this tightness started to ease as new zinc mine projects came on stream, while smelters within and outside China moved closer to producing at full capacity.

On the demand side, weakness in Chinese construction in 2018, which impacts steel and demand for the iron ore and zinc that go into galvanized steel, also helped to put downward pressure on zinc demand and prices. At the time, the decline in zinc took lead down with it. This weakness continued in 2019, but low stocks globally helped keep a floor under prices so the lows of 2015-2016 were not repeated. While supplies of zinc metal grew in China thanks to capacity additions, declines in production from the rest of the world meant that the supply picture was tighter than it might have otherwise been, helping to keep the market relatively more balanced in the face of weak demand (including in the automotive industry).

Looking ahead, global zinc consumption is estimated by Wood Mackenzie to grow by 4 per cent. in the medium term. The market expects the increased demand to be met by increased Chinese supply as very few new viable pure zinc mines exist and new mining prospects have proven to be highly capital intensive. Smelting capacity is also limited, particularly in the short term, meaning that even though concentrates look to be well supplied, refined metals prices are likely to be strong.

Nickel

After falling by 50 per cent. in 2015, nickel prices proceeded to rally over 40 per cent. after the Philippines announced limits on nickel mining activity. The ban has constrained the market supply, especially in China, of high quality nickel ore with no natural market substitute readily available. As such, LME nickel inventories decreased markedly and prices have endured significant bouts of volatility.

Supply growth in China has been constrained by environmental policy-related restrictions, leaving Indonesia as the main source of new nickel units, almost exclusively in the form of nickel pig iron. Longer-term concerns over the availability of supply were tempered somewhat by the announcement of low-cost, Chinese-led, high pressure acid leach projects. The feasibility of these plans remain uncertain and the speculative community has turned against nickel for now.

In 2018, nickel market saw its third consecutive year of significant deficit, with exchange stocks down by 350,000 tonnes from their peak in the fourth quarter 2015. In 2015, nickel was the hardest hit amongst the non-ferrous metals group over the year. Nickel inventories rose substantially on the back of weak demand, substantial de-stocking of stainless steel and less supply disruption than had been anticipated due to the ban on ore exports from Indonesia, leading to a price correction of closer to 47 per cent.. The lowest point was reached in November 2015, with a price at USD 8,300/MT. At year end, the nickel was priced at USD 8,820/MT. Over 2016 and 2017, stainless steel production recovered, allowing stocks to draw and nickel has traded in a range of USD 9,000/MT to USD 13,000/MT. In 2018, nickel has traded in a range USD 10,750/MT to USD 15,750/MT with the peak price reported in June 2018, prices slipped all the way to USD 10,750/MT. Nickel prices then went on a bit of a wild ride in 2019, rising all the way to USD 18,000/MT in mid-year on the back of supply restrictions imposed by Indonesia, but then falling back to USD 13,000/MT as the impact of the supply restrictions appeared to be less serious than first anticipated.

On the demand side, stainless steel production was strong over the year, although worries about an economic slowdown in China hurt consumption and prices later in the year. Asian stainless steel markets felt the pressure of rising low-cost Indonesian exports more broadly and the further addition of Filipino and Indonesian stainless steel capacity remains a key risk factor.

Battery demand continued to grow at a healthy rate. Electric vehicle production and sales beat consensus expectations yet again, with China leading the increase in adoption rates. The Group expects 2020 to be a pivotal year for nickel. On the one hand, demand for nickel in EVs is not yet having a material impact on the market and supplies are expected to increase. On the other hand, the implementation of Indonesia's ban on nickel ore exports from 2020 will offset any increase, and depleting ore and metal stocks are likely to support the price in expectation of a more robust 2021, when the effect of the strong demand fundamentals will be evident.

Cobalt

After several years of relatively weak demand, cobalt has been one of the best performing mined commodities over 2016 and 2017, with the LME cash price rising by almost 220 per cent. over the period. Traditionally, demand has been subdued due to the elevated price of the product – 50-60 per cent. of global reserves are owned by the DRC (Congo) where the industry is largely driven by small-scale artisanal miners, other than a few larger players. These small miners are typically price-sensitive and, in the past, we have seen them cut supply if prices drop below a certain level. Political instability in the country has also acted as a barrier to entry for global players, with limited investment in infrastructure meaning that margins come under pressure as soon as prices drop. Beyond the Congo market, supply has remained relatively limited as cobalt is typically obtained only as a by-product of nickel and copper-mining activities and cuts to base metals Capex in recent years, in the face of low copper and nickel prices, have had a knock-on impact on cobalt output from this source.

Cobalt prices were less volatile but nonetheless moved substantially, the first part of the 2018 fiscal year, before moving back down in the second half. Essentially, the market moved from concern over impending shortages to realising that short-term production can and had been ramped up, specifically in the Democratic Republic of the Congo. We witnessed a move in the price of cobalt from USD 60,000/MT to USD 95,000/MT between September 2017 and March 2018, and then a retracement from USD 95,000/MT to USD 60,000/MT between March 2018 and September 2018, as a result of higher supply and macroeconomic concerns. Prices are likely come under pressure in the short term as new supply continues to come online. However, in the longer-term, cobalt still looks to be undersupplied given the expected growth in electric vehicles and other uses. As such, prices expected to recover at some point.

Battery demand is crucial in terms of the evolution of global cobalt demand, with cobalt an important element within lithium-ion batteries, traditionally used in mobile phones, laptops, digital cameras etc. Demand from industrial sources and Electric Vehicles ("**EVs**") has been an important catalyst for the recent rise in prices and will be a key driver of demand in the years to come. Batteries remain expensive, and reducing costs is a critical precondition to boost EV sales. Changing metal intensities has been a focus for this, with reducing reliance on the expensive cobalt a particular focus, and many manufacturers are shifting from batteries with a 1:1:1 nickel/manganese/cobalt mix to a mix of 6:2:2 or even 8:1:1. Clearly, the mix of metal loadings will be a key factor in cobalt demand growth going forwards, with nickel, in particular, likely to be the key winner if the industry settles on the 8:1:1 weighting.

For much of 2019, the cobalt market was looking for direction as it worked through the oversupply built up in recent years. Then came news that Glencore is to halt production at its Mutanda cobalt mine in the DRC towards the end of the year. This, together with a decrease in artisanal supplies, triggered a much-needed market correction, further fuelled by a pick-up in cobalt demand in the fourth quarter. The fundamentals for the metal remain extremely strong. Indeed, in 2020, the Group expects demand growth to exceed incremental supply, pushing the recovery of the market and revealing the true need for additional units at a time when the EV growth projection is becoming a reality.

Iron ore

For bulk commodities, where 40-50 per cent. of costs were energy-related at the peak, the collapse in oil prices in late 2014 led to a strong decline in prices. For iron ore, a slowdown in Chinese demand in 2014, along with a 180 MMT supply increase from global suppliers, sent the market on a downward trend. Prices in 2015 came down by over 55 per cent. from 2014 average levels of USD 97/MT, ending 2015 trading around USD 44/MT, which had decreased 68 per cent. against average 2013 levels.

Despite depressed prices, major producers continued their ramp up stages in 2015 in an attempt to cut per tonne production costs and maintain revenue streams. Smaller producers and mines, however, which could not cut costs as easily, were forced to shut down. As a net effect, seaborne iron ore supply seemingly saw almost no growth in 2015. Yet, this masks a battle for market share between Australian and Brazilian suppliers that increased exports by 50 million tonnes in 2015, and a long tail of smaller producers that were displaced.

The year 2016 saw iron ore rally sharply, from under USD 40/MT to nearly USD 70/MT, as traders piled in on hopes that Chinese stimulus measures would boost demand. The election of Donald Trump in November 2016 spurred another leg upwards to over USD 80/MT on renewed optimism for the demand outlook in this market.

Better demand from both within China and externally has led to a sustained increase in volumes traded, although early in 2017 stockpiles began to build up in China as mills slowed activity due to Chinese New Year and also to pollution concerns, leading to a reduction in capacity. During 2017, the price of iron ore fluctuated in a range between USD 90/MT and USD 50/MT, reaching a price of USD 70/MT at the end of September. Against the backdrop of reduced capacity, margins in China look to be robust ahead.

Iron ore saw its usual seasonal ups and downs over the winter of 2017-2018. Prices rose into February 2018 as mills restocked ahead of a spring production ramp-up. Then with restocking complete, prices sank and from there, benchmark prices saw a period of historically low volatility. China's iron ore imports ended up being weaker in 2018. Part of the shortfall was filled by running down stocks of ore that had built up at ports, but 2018 also saw a large increase in the use of scrap steel as a raw material in China. Scrap metal offset is likely to remain a long-term theme in iron ore and steel markets in China. However, with rising consolidation and structurally higher capacity use in the global blast furnace fleet, demand for productive iron ore looks set to remain strong.

In 2019, the iron ore market was heavily influenced by supply side disruptions including the tragic collapse of the tailings dam at Vale's Brumadinho mine in Brazil in January 2019, which significantly reduced Brazilian ore exports in the second quarter and generally created a volatile pricing environment. In April, Brazil exported just 17.6 million tonnes – the lowest monthly total in more than 10 years. Australia was hit by a cyclone, which disrupted supply of ore from Rio Tinto, BHP and FMG. Knock-on effects included a sharp fall in Chinese stocks and a jump in spot prices from USD 75 per tonne in February to USD 120 per tonne in July. The Group expects the iron ore market to return to balance in 2020 as Brazilian supplies normalise.

Coal

Coal followed a trajectory very similar to iron ore, falling throughout 2014 and 2015, before rallying sharply in 2016 and 2017 following Chinese supply reform and global economic recovery. Prices of major seaborne indices for thermal coal range between USD 90/MT and USD 100/MT in 2017, after touching below USD 50/MT in early 2016. In 2018 thermal coal traded in the range of USD 90/MT to USD 120/MT as the coal markets remained tight, a situation shaped by little incremental supply growth outside of Indonesia and the adverse effect of ongoing safety and environmental inspections on domestic Chinese production.

Prior to the closures, the world was looking to be long on supply, hence the drop in prices. Most of this supply has been generated in Australia, where supply has been strong throughout the past two years as producers look to improve cost efficiency by maximising throughput. Australian supply had been supported by a weaker Australian dollar and improved cost efficiencies. Russian supply had also been strong, helped by a plunging rouble. Elsewhere, supply growth has been more muted. South Africa remains limited by infrastructure bottlenecks, Colombia failed to grow substantially from 2013 levels and US exports slowed as legacy hedge programmes have been exited. Indonesian supply also appears to have slowed down, hampered by a number of regulatory interventions and by market conditions.

Very strong Australian production coincided with a fundamentally weak China, which changed the recent flow of material around the world. Since the mid-2000s, coal flows have moved increasingly to the east, with up to one third of South African material flowing into Asia, as well as periods where both Colombian and the US tonnes have moved out of the Atlantic and into the Pacific market. There are almost no South African tonnes moving past India and there are more Australian tonnes having to flow west.

The weakness that has afflicted global coal markets for several years as a result of a structural surplus in supply, dramatically worsened in 2015. Demand for seaborne coal imports in China – previously the largest market by far – fell sharply as the weakness of the Renminbi rendered foreign coal uncompetitive with surplus domestic supplies. Prices dropped to levels last seen in 2007, increasing pressure on producers. On the other hand, currency weakness in many producing countries, coupled with lower fuel costs, enabled many mines that would otherwise have gone out of business, to carry on.

In 2018, demand for coal grew further for the two largest emerging economies, China and India. This resulted in strong seasonal price movements, with sharp increases over the winter period and ahead of the summer season. In addition, with supply growth limited to low-to-mid calorific qualities, the premiums

for higher-quality coal widened sharply. Furthermore, efforts on the part of the Chinese to limit the coal imports and continuing rail logistics issues in India brought uncertainty and volatility to the market.

After a strong 2018, global thermal coal prices collapsed in 2019, as switching from coal to gas in power generation, combined with a mild winter and less hot summer, led to a significant supply overhang. Low-cost gas supplies from the US became an attractive alternative to coal on a global basis (it was the first time power utilities outside the US had switched baseload fuel) and demand suffered in all regions, including North America, Europe and Asia. Even in India, consumption dropped on the back of weaker macroeconomic performance.

Group Management of the Covid-19 Pandemic

Ensuring business continuity

As any company operating across the globe, the Group has adapted its activities and working methods to manage the constantly evolving circumstances related to the outbreak of the Covid-19, which was declared as a pandemic on 11 March 2020 by the World Health Organisation.

The first challenge was to ensure that the Group would continue running its global operations with minimal disruptions and on an unhindered basis. Thanks to a strong Business Continuity Plan (BCP), tested on a regular basis, the Group was able to manage the lockdown which started in early February in China, then followed by similar measures in Europe and the rest of the world, ensuring steady operations with a strong focus on its risk management framework.

The Group adopted a management plan with the aim to manage the response to Covid-19 in a responsible and pragmatic way. Company's policy is to comply with, or go beyond when considered necessary, governments' advice and recommendations, and to protect employees and contractors while maintaining business continuity. The Group adopted a policy of social spacing at many of its locations across the world, in line with guidances to limit the spread of the pandemic as much as possible. Significant numbers of employees have worked, currently work or will work for some time, from home. At a number of locations related to the Group's industrial assets, advanced continuity plans have been put in place to cope with social distancing requirements and heightened level of absenteeism due to the pandemic.

Restrictions are now being lifted in many places around the world where the Group operates, with social distancing is expected to continue for months, though the company also faces continued lockdown in many countries.

Unprecedented volatility and contango structure in the oil market

As explained in Section "Analysis of the Impact of Declining Oil Prices on Trafigura", the Group's business model benefits from volatility in the markets, as well as from a contango market structure. Oil market over the first half of 2020 combined these two conditions, which created favorable environment for the Group's profitability.

The commodity sector has seen unprecedented levels of volatility and dislocations in oil markets over the first months of 2020, which was profitably exploited by the Group's trading teams. The graph in Section "Analysis of the Impact of Declining Oil Prices on Trafigura" shows the clear connection between high volatility and gross profit generation since 2008, together with the extrordinary level of volatility (through the VIX index) observed in the first half of 2020.

The switch from backwardation to contango in the oil markets started in February 2020, when spot market prices for oil decreased and became cheaper than contracts for delivery in the future (e.g. 6 months). This contango structure steepened in March, when oil prices significantly dropped following the combination of a shock in demand – due to the shock of the coronavirus pandemic to the global economy – and in supply – as some countries decided to defend their market share (Saudi Arabia and Russia, in particular). This situation triggered a need to absorb excess supply and place it into storage. Companies such as the Group were able to store significant volumes of crude and oil products across the globe thanks to access to important storage capacities (which had been secured prior to the peak of the crisis).

In March and April 2020, at the peak of the global lockdown, oil demand destruction was estimated between 30 and 35 mbpd according to the Group's Research Team. However noting that the company has not witnessed a reduction of its oil traded volumes during those months, which were generally in line with

previous period – or slightly higher for some oil products as the Group took advantage of the contango opportunities.

Group funding model has proven to be resilient during the Covid-19 crisis

The funding model of the Group is described in details in Section "Funding Model".

A key advantage of this financing model is that short-term uncommitted transactional facilities (which finance most daily trading activities) and the securitisation programmes (which finance trade receivables and inventories on a non-recourse basis) are self-liquidating, i.e. they are repaid directly from the proceeds of the underlying transaction. Lenders initially retain security over the stock, and then over the associated receivable. As cash from the receivable is collected, the bilateral loan is repaid. As such, loans under bilateral lines are not repaid from cash flow generation by the company, but rather from the transaction itself. Hence, banks view bilateral financing favorably and are generally more willing to lend under (uncommitted) bilateral lines than other forms of financing. This ensures bilateral lines are a reliable form of financing even in distressed credit markets. Since September 2010, the Group has grown its bilateral lines by circa USD 24 billion, with total transactional lines now amounting to over USD 43 billion.

During the Covid-19 crisis, the Group has maintained a strong liquidity position, with low utilisation level under trade finance lines due to the low price environment. As a result, the Group has ample room to continue to trade and notably capture the contango arbitrage opportunities in the oil markets. Moreover, prior to the Covid-19 crisis hitting Europe and Western countries, the Group successfully refinanced three important facilities: two major transactions in the international syndicated bank loan market and a US private placement with long tenor notes (as presented in details under 'Long Term Financing', 'Revolving Credit Facilities' and 'Other Corporate Facilities').

Credit risk management

<u>Trading counterparty portfolio</u>

The Group has taken some preventive measures when the Covid-19 crisis emerged. A detailed portfolio review was done by the Credit team, using on the following approach:

- Targeting sectors with the most important underlying risk in current environment - i.e. E&P and aviation business;
- Identifying companies with a weak credit profile;
- Reducing other credit lines (in relation to other sectors) in some instances, typically due to low commodities prices.

Following this portfolio review, a number of credit lines were adjusted by the Credit team. However noting that these reductions barely affected the Group's trading business, especially given current lower price environment.

The Group's Credit team assesses on a case-by-case basis the merit of requests from some counterparties to extend their payment terms. So far, counterparties which were granted such payment extension have paid their due amount in time. As a result, as of May 2020, the overall amount of overdue receivables remained within the range of usual monthly fluctuations.

The Credit team continues to review the portfolio an ongoing basis, with a number of automatic triggers for a review set in the systems (usually market driven). The company as a whole is fully focused on credit risk monitoring as the environment is expected to remain difficult and uncertain in the coming months. In addition, in line with normal course of business, the Group mitigates an important portion of counterparty risk with the use of credit mitigants, such as bank letters of credit, silent payment guarantees or insurance.

May 2020 WTI Contract turning negative

The May 2020 contract for WTI Cushing was expiring as at 21 April 2020. The WTI contract is a physical contract, so unlike an equity or other financial instrument, when the contract comes to expiry and has not been closed out, there is a delivery of a physical quantity of the commodity in question. For physical players like the Group or its peers, who can access storage tanks, ships, pipelines and so on, and

who also have existing contracts to sell oil to refineries and other end-users, this is part of the company's day-to-day business.

However, a financial player almost never wants to actually take physical delivery of the product, because then it becomes a logistical issue to deal with. What was seen on 20 April 2020 was the culmination of the trend that was observed during the 1.5-2 month period before, which is that there was too much oil still being produced in a world that actually needed a third less of it (rough estimate) compared with the start of the crisis.

As a result, storage tanks had been filling up at a breakneck pace globally. Cushing, which is where WTI oil is physically delivered to, is the most visible storage hub in the world. Therefore, what these price movements told us is that Cushing was effectively full already and was not able to take any more physical oil.

It is important to note that the entire oil complex did not go negative, just this one contract. Brent, the other major marker grade, for example still continued to trade above USD 20/bbl as at 20 April 2020. This was the market saying there was a physical problem at the Cushing storage and delivery hub, reflecting broader issues in the market as a whole but with the crux at this one location at that time.

This negative price was an opportunity for companies like the Group, used to deal with this type of logistics issues, while generating some profit. The Group's primary role as a physical commodity trading firm is to address disconnects and inefficiencies in the markets and service its global customer bases complicated needs. As such, the Group has been acting throughout this crisis to help manage the oversupply that has been building and provide tailored solutions to its customers.

Competition

The Group's three main sources of competition are:

- Global traders (the Group's peer group);
- Producers or integrated companies such as the oil majors or integrated giants; and
- The group of smaller independent traders that are focused on niche markets defined either geographically or by single commodities.

The Group sees its two main competitors as the Vitol Group of Companies and Glencore plc. Vitol is mainly focused on large and liquid oil markets, whereas the Group's trading is more global and therefore its profit generation sources are more diversified. Glencore focuses primarily on metals, concentrates and energy. With the merger in 2012 between Glencore International and Xstrata plc, the commodities world has witnessed a major change in that Glencore is increasingly acting as a mining corporation, with the company marketing its own production.

Over the Group's 27-year history, competition in the global commodities market has altered as a result of a number of structural changes in the industry. These changes have caused challenges, but have also created opportunities for trading companies large enough to take advantage of them. They have included:

- The mergers of large integrated producers (e.g. Total, Exxon Mobil, ConocoPhillips) which often resulted in reduced trading activity by the merged company, providing opportunities for commodities traders in balancing global demand and supply.
- A move away from vertically integrated business models by some of the majors which resulted in the disposal of some infrastructure and logistical assets and enabled some commodity traders to build up scale in logistics.
- Regulatory changes in the banking sector which have led to more stringent restrictions being imposed on the lending activities of banks. This has also increased the cost of lending and has reduced the liquidity available to some smaller competitors who, unlike the Group, might not have strong bank group support. This has led to the disappearance or contraction of mid-sized companies, creating opportunities for larger traders such as the Group.
- Changes and developments in the geo-political environment, particularly in relation to sanctions regimes, have meant that incumbent market participants must be able to not only demonstrate their abidance to these rules, but also that they have strict controls in place to prevent any breaches from occurring to satisfy the requirements of banks and other stakeholders.

- Increased operating costs and inability of smaller players to integrate into the supply chain.
- The erosion of physical traders' superior price information as a result of increased transparency in pricing and the sophistication of commodity producers in the commercialisation of their products. This has opened opportunities for traders such as the Group, which has been steadily growing its industrial fixed and logistics asset base, reducing its reliance on pure trading activities as well as offering integrated logistical services yielding higher margins.

The Role of Commodity Traders in the Financial System

Allegations have been made that global physical commodity trading companies should be considered as systemically important to the world economy, claiming that they could pose a threat to global financial stability similar to that created by the 'shadow' banking system during the global financial crisis of 2007-2009.

In 2013, a study was commissioned by the Global Financial Markets Association ("**GFMA**"), an organisation representing the interests of the world's leading financial institutions, to review the so-called 'shadow' banking system and financial institutions considered as systemically important. This study found that although global commodity trading companies do indeed compete with certain banks active in the physical commodities trading space, they do not pose a systemic threat to the system as a whole.

The report, which was never officially released, was aimed at the Financial Stability Board ("**FSB**"), a group of global regulators who had been discussing the imposition of stricter regulation and capital requirements on commodity trading companies. This was widely seen as a tactic by some banks active in the commodity trading space as a way of creating greater equality between market participants by seeking to usher in further restrictions on pure commodity trading companies.

The main argument was, and continues to be, that commodity traders engage in shadow banking, stemming from the fact that commodity trading companies (i) extend credit and working capital to their customers, as well as (ii) use securitisation programmes.

In response to the first point, trading firms do indeed provide funding to producers but this is in the form of prepayments and other similar arrangements. It is quite common that traders advance-fund volumes of commodities in exchange for receiving the agreed volumes when they are extracted. The commodities essentially form collateral for the advance-financing. The associated performance and credit risk of the producers are in most instances covered by insurance, limiting the exposure of the commodity firm extending the credit. Moreover, such financing typically relies on specialised commodity finance banks, which will carefully assess the terms of a prepayment transaction before putting their own capital at risk.

In response to the second point, the securitisation structures used by physical commodity traders such as the Group are very different to the financial structures that were the root cause of the global financial crisis of 2008.

To further elaborate on this, commodity traders' securitisation platforms do not involve the kind of maturity mismatch that was the flaw of arbitrage securitisation vehicles such as SIVs or CDOs. Indeed, to the extent there is maturity transformation involved in the commodity securitisation platforms, it is the opposite of the type that proved problematic during the financial crisis. The underlying assets are extremely short dated (such as trade receivables) and/or very liquid (such as inventories of base metals in LME warehouses). The assets typically have shorter maturities than the liabilities issued to fund them. Traditional SIVs had to rollover their liabilities, whereas commodity trade securitisation programmes must replenish their assets. The former is far more problematic than the latter because the run risk is far greater.

Furthermore, default rates on securitised trade receivables are very low and in one respect, the development of securitisation programmes such as those operated by the Group, have helped free the capital demanded of commodity trade finance banks, since risk is transferred to the capital markets instead.

Given that the main focus of commodity traders is not in providing financial intermediation, but rather in providing logistical services and because their assets could be quickly re-deployed if necessary, it is difficult to envisage how more stringent regulations and capital requirements would be of benefit to the wider financial system.

Additionally, following the recent developments in the banking market over 2014, which caused banks to reduce lending in the commodity trading sector, large commodity traders, which have been able to maintain sound access to the banking market by virtue of their size and sound risk management practice, are increasingly seeing their ability to extend prepayment financing options to smaller counterparties as a key differentiator and a way of developing their access to new markets and increased volumes. Bearing this factor in mind, more stringent regulation on commodity trading companies would likely have the knock-on effect of disrupting the global trade that commodity traders facilitate.

In 2014, as a direct result of these debates, the Group took a pre-emptive decision to better inform all stakeholders about the business model, inherent risks and financing of the firms operating in the commodities trading industry. To do so, the company commissioned two white papers including *The Economics of Commodity Trading Firms and Foundations for Growth – Infrastructure Investment in Emerging Markets*. The papers were independently written by Craig Pirrong, Professor of Finance at the Bauer College of Business at the University of Houston and by Russell Jones and Camille Viros at Llewellyn Consulting to shed light on the differences between commodity trading firms and financial institutions. They have been presented to and referenced by regulators, politicians, and competitors alike; and in early 2015, the Group published an additional white paper published by Professor Pirrong, *Not Too Big to Fail – Systemic Risk, Regulation and the Economics of Commodity Trading Firms*, which further explored the difference between physical commodity trading firms and financial institutions. This was discussed with senior European and North American regulators during that year.

In 2016, the Group also published and distributed to a wide public audience an educational guide to the purpose and practices of physical commodity trading firms entitled Commodities Demystified: A Guide to Trading and the Global Supply Chain. The second edition was published in 2018 and was supplemented in January 2020 with a dedicated section on prepayments.

Operational Organisation and Procedure

The main operational responsibilities are split geographically between Athens, Calgary, Geneva, Houston, Johannesburg, Lima, Montevideo, Singapore and Shanghai. Those offices have operations departments and most have a finance function to support local trading activities. Trafigura Global Services Private Limited ("**TGS**") handles most middle office and back office functions, and is located in Montevideo and Mumbai. The Shanghai office manages all China related activities.

All of the Group operational responsibilities are subdivided into three main categories: the front, middle and back office. The front office consists of traders on the different trading desks. The middle office provides a broad range of necessary support functions to the front office (Deals desk, Chartering, Contracts administration, Traffic operations and Finance). The back office provides diversified services to the Group's operations as well as to the Group (Accounting, Compliance, Tax, Corporate Affairs, IT, Legal and HR).

The segregation of duties found between the Front, Middle and Back Offices, and in between the departments, is key to the effective management of data collection and its accuracy, and therefore key to manage operational risk. Each department has its own clearly defined set of responsibilities and accountabilities.

Business Transformation Team

As the Group's commercial footprint continues to grow in scale and scope, there is an increasing need to optimise the efficiency of business processes, the capabilities of the people and the capacity to leverage technology. Consequently, the Business Transformation team was formed in 2017 to review all aspects of the Group's operations, covering the front, middle and back office. Its objective is to re-engineer internal processes to support the Group's next five years of growth in three broad aspects:

- Streamlining and standardising business processes to optimise efficiency and scalability, while retaining the flexibility to deal with a rapidly changing industry environment and with widely varying trade life cycles;
- Optimising technology and IT infrastructure as a competitive tool to secure maximum commercial benefits; and
- Enhancing human capital via bespoke talent development programmes to support the new business processes and IT improvements.

The Business Transformation team reports directly to the Chief Operating Officer (the "**COO**") and is supported by a senior team drawn from across the Group.

Operational Departments

Front Office

Traders

Traders initiate sale or purchase transactions, either directly with a customer or through a commodity broker. In both cases, the contracts are negotiated directly with the contracting party. The Group's trading operations are organised by product desk. The main desks are:

- Crude oil, fuel oil, biodiesel, middle distillates, gasoline, naphtha, LPG, LNG, natural gas, condensates for the oil trading business; and
- Copper, lead, alumina and zinc as concentrates; copper, lead, zinc, aluminium and silver together with gold as a by-product of refined metals; and the iron-ore and coal desks on the minerals trading side.

Trading positions are not established individually by each trader but managed on a book basis. Each book generates its profitability by exploiting natural/physical arbitrages in the marketplace.

For all trades (whether sales or purchases), the trader has to verify the financial conditions, check the credit authorisations and request risk cover if needed. In the case of an existing customer, risk limits and acceptable credit terms are available on the Group's IT systems. Any transaction involving a new customer will trigger the Group's KYC procedure. The finance department has a final veto on any transaction.

There are established risk control procedures in place for the traders. For example, once a trader has entered into a transaction, he/she is required to enter a deal ticket into the system within 24 hours. Failure to do so will be discovered through:

- Receipt of supply contract with no corresponding deal ticket in the case of a physical purchase;
- Protest from the contractual counterparty for non-receipt of a contract for physical sale;
- Failure to issue a Letter of Credit on time; and
- Failure to nominate a vessel on time for the contracted cargo.
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Middle Office

Deals Desks

The role of Deals Desk is to ensure that trading profits and exposure are correctly reported. Deals Desk professionals verify that the results are accurate and reflect the true profit and loss of the trading activities. This data is also used to compile the Group's statutory accounts. Deals Desk's organisational structure mirrors that of the trading book structure and Deals Desk staff are physically sat on each trading desk for specific product books. It is important to underline that the Deals Desk individuals are independent from the trading departments and that they report directly to their respective Global Head of Deals Desk who in turn both report to the Group's Chief Operating Officer.

The Deals Desk is responsible for the following main areas:

- Preparation of provisional P&L statements, monitoring daily variance in trading P&L, volumetric as well as economic exposure to price quotes and production of a written commentary on variances;

- Ensure that all market price risks are captured and hedge actions are executed as well as the timely allocation of physical, swap and futures trades;

- Daily mark-to-market of P&L, initially based on cost estimates, and later adjusted for actual costs as they become available;

- Monitoring of derivatives trading.

For all open positions, the Group has a very strict, two pronged risk policy that sets both a stop-loss position and VaR limits.

Furthermore, the Group has a Chief Risk Officer ("**CRO**") who further enhances the Group's market risk management on a Group-wide basis. The Group's CRO is responsible for ensuring that there is a full and accurate awareness of risk throughout the Group and that these risks are professionally analysed and managed. The CRO reports to the Group's COO and works closely with Deals Desk staff.

Traffic/Operations Department

The Traffic/Operations Department role is to accurately follow each transaction from inception to completion, focusing on the overall shipment procedure and the related upstream and downstream sub-processes. The department's organisational structure mirrors the trading book structure. This means that individuals from the Traffic/Operations Department are located on each trading desk and have a portfolio of transactions within a specific product book. The Traffic/Operations Department is also responsible for the safety of the operational transactions and the compliance with relevant regulations. Each representative is responsible for following a given transaction from inception to completion including involvement and co-operation with the related departments for the following aspects of a trade:

- Invoicing;
- Reviewing the purchase/sale contract;
- Vessel vetting;
- Instructing the ship's Master;
- Lay time calculations;
- Appointment of inspection companies;
- Insurance declarations;
- Ensuring load, voyage and discharge occurs safely in line with relevant regulations;
- External liaison; and
- Timely IT system data entries and updates.

Chartering Department

Physical trading of commodities involves the port-to-port shipment of cargoes under charter-parties. The Chartering Department's major objective is to find the best possible transportation solution for the underlying cargo by effectively using the market and timing circumstances to obtain the most competitive rates. The Chartering Department consists of specialised professionals based in the Group's main trading offices as well as Trafigura Maritime Logistics Pte Ltd, a Singaporean company, which provides specialised advice on chartering issues. Chartering staff maintain a close relationship with traders, the traffic/operations department and tanker brokers as well as ship owners.

Contracts Administration

The contracts administration department's main function is to draft all physical sales agreements and to review all physical purchase agreements to ensure that the Group is fully and legally protected. The contracts administration department works closely with the traffic and operations staff. Furthermore, they advise traders and other staff in the middle office about potential problems that may arise as a result of the contracts. The contracts administration staff seek authorisation from the traffic and operations department and the insurance and trade finance teams in the finance department on each trade prior to completing the documentation. The Group ensures that the contracts for each trade are either sent or received (depending on whether the Group is acting as the buyer or the seller) within 48 hours after a deal ticket is entered into the system. Each standard template is adapted to reflect the terms of the individual trade.

Finance Department

The Finance Department supports the activities of the whole Group and is involved at the earliest stage of transactions and projects. The Finance Department is responsible for the financial risk assessment and has the capacity to veto any transaction. Its main functions are broken down into the following subdivisions:

- Corporate Finance;

- Structured Finance;
- Trade Finance;
- Credit;
- Insurance;
- Corporate Funding; and
- Treasury.

Corporate Finance Department

The Corporate Finance team is located in Geneva and acts as the Group's internal investment bank, focusing on medium and long-term financing for the Group. The Corporate Finance team is mainly responsible for the origination and execution of corporate facilities (including Revolving Credit Facilities ("**RCFs**"), capital markets transactions and general corporate purpose facilities, securitisation, etc.), the financing of the Group's fixed assets as well as coordination of overall bank and investor relationships. The team is in charge of providing advice on balance sheet management and financial forecasting to the Management Committee. The team works closely with other teams in the finance department, including the Structured Finance and Trade Finance departments as well as the Investments/M&A team, the finance teams at Puma Energy, Impala Terminals and the Mining Group

Structured Finance Department

The Structured Finance Department is centralised in Geneva with representatives in Johannesburg, Mumbai, Singapore, Shanghai, Montevideo and Houston. The structured finance department is responsible for structuring complex trade finance transactions supporting commercial operation. The structured finance professionals are regionally specialised and deal with a diverse range of funding requirements. The team has a varied role and plays a significant part in the transactions, from inception to conclusion. They have regular meetings with the trade finance and credit departments in which they review all trading activities. The structured finance department is also involved in the KYC procedure.

Trade Finance Department

The Trade Finance Department is primarily based in Geneva, with representatives in Houston, Singapore, Montevideo and Shanghai, providing a wide range of trade finance services. The Trade Finance Department is responsible for arranging all necessary financing for the Group's trading operations, as well as ensuring that credit decisions are properly implemented. The Group's trading operations can be financed by various instruments (i.e. open accounts, documentary collections, Letters of Credit ("**L/C**"), guarantees, Letters of Indemnity or advance payments). They ensure that all contracts are consistent with the recorded system entries to prevent P&L losses and to ensure that all documentary and financial instruments are issued correctly. The Trade Finance Department works closely with different operational departments at an early stage in all transactions to identify and avoid any possible financing problems. Crucially, a vessel can only be instructed to load or discharge once approval from Trade Finance has been obtained.

Credit Department

The Group's Credit Department performs fundamental credit analysis with representation in nine offices worldwide. The Credit Department's key role is to safeguard the receivable assets on the balance sheet. It assesses the credit risk associated with the company's counterparts, sets appropriate internal limits, monitors exposures and ensures that relevant related documentation is completed and maintained. The Credit Department establishes credit limits for all counterparties and reviews them at least once a year. Any exposure above the credit limits is covered on the insurance or financial markets. The Credit Department has the role of final approval as to whether an unsecured transaction can be entered into. The Credit Department is also involved with setting credit limits for new trading counterparties.

Insurance Department

The Insurance Department is responsible for arranging adequate cover for all types of operational risks and liabilities of the Group. The Insurance Department sets up and monitors various global insurance policies to provide coverage for a broad range of risks and liabilities, including but not limited to:

- Marine Cargo in respect of the Group's physical cargo/stock cover for various risks, including, but not limited to: fire, contamination, loss, environmental damage, leakage, etc.;
- Third party insurance cover for liabilities associated with stocks, industrial assets, employees and pollution;
- Property insurance and directors and officers liability insurance; and
- Political and credit risks insurance cover, depending on specific characteristics of a single transaction in collaboration with the Credit, Structured Finance and/or the Trade Finance Department.

Aside from arranging cover, the Insurance Department is also responsible, in the event that an insured risk occurs, for handling the resulting claim. When a cargo accident occurs (e.g. contamination, damaged cargo, shortage etc.) or a legal claim is made against a Group company, the Insurance Department will handle the claim from the outset and will manage the recovery of proceeds under the appropriate insurance policy.

Back Office

Trafigura Global Services

Trafigura Global Services Private Limited (TGS) is the Group's fully owned Shared Service Centre ***("SSC"),*** established in July 2011 with the mandate of centralising the Group's operations, yielding efficiency gains, driving process consistencies and providing support to front offices roles. TGS houses an array of teams carrying out middle and back office functions. Main support teams include Accounting Operations, Deals Desk, Treasury, Trade Finance, Compliance, Insurance and Operations Settlement and provide critical support to other teams located in offices around the world. Furthermore, TGS supports Group functions, including IT (on application, infrastructure support) as well as HR.

TGS has offices in Mumbai and Montevideo to take advantage of time zones, to enable a 'follow-the-sun' approach to business operations, supporting main offices in Singapore, Geneva, the US and South America. TGS teams communicate with banks, brokers, vendors, counterparties, inspection companies etc. In addition, TGS maintains a culture and work environment that is on par with the other commercial functions of the Group, despite being a relatively new addition. This helps facilitate a culture of innovation, growth and ownership in the business.

Accounting Department

The Accounting Department is present in a number of offices, but mainly Geneva, Amsterdam, Montevideo and Mumbai. The department's main objectives are the maintenance of the accounting ledgers, balance sheet management, legal entity management overhead reporting and the production of the resulting reports. Its responsibilities include producing annual statutory accounts, debtors, creditors and intercompany accounts as well as completing the normal day-to-day accounting tasks. In addition to these regular accounting functions, the department acts as an important second entity of control, after the Middle Office, mitigating the risk of inaccurate and incomplete deal capture. Regarding its structure, the accounting department is subdivided into three areas of responsibilities, Group accounting, oil and energy accounting as well as metals and minerals accounting. Within the accounting department there is also a Group Cost Management ("**GCM**") team which is based in Mumbai and deals with central overheads such as office costs and expense claims.

Legal Department

The Legal Department has lawyers based in Geneva, Singapore, Shanghai, Johannesburg, Montevideo and Houston. It is staffed by experienced lawyers who are primarily lateral hires from law firms, investment banks, industry and secondees. The department relies on a limited number of leading law firms to provide additional resources and expertise.

The department provides and manages legal support across all of the Group's businesses and activities. It manages all contentious matters, any investigations or inquiries as well as the Group's commercial transactions – for instance, M&A, JVs, significant transactions, financings, anti-trust and regulatory matters.

Compliance Department

The Compliance Department is staffed by a number of experienced Compliance Managers who are supported by a team of compliance advisors and KYC administrators. The Compliance Department is also assisted by a global network of compliance representatives embedded in business functions in local offices who are senior members of such offices and non-front office staff whose role is to provide a focal point for the escalation of local compliance issues.

The compliance officers act as advisors to employees on any compliance related matters including the application of, or compliance with, the code of conduct in specific circumstances, establishing proportionate procedures and controls in order to manage the risk to the business of potential failure to apply the appropriate standards of behaviour, and finally escalating issues, risks and breaches to senior management and the relevant Compliance Committee.

The Compliance Representatives act as a local, initial point of contact for any employee to raise any compliance-related issues. They may then escalate the issue and assist with implementing any necessary resolution action.

The compliance team is at the forefront of implementing key compliance polices designed to keep the company in line with all applicable laws and regulations by ensuring that:

- The Code of Business Conduct is signed by all members of staff. All staff receive mandatory training to ensure they understand its implications;
- The Trading Policy is signed by all staff and face to face training is provided by compliance to all those in the front office;
- Online mandatory training completed by all staff not only on the Code but also key compliance areas such as AML and Competition law;
- Guidance sent out regularly to the business as new laws and regulations are implemented and policies and procedures amended; and
- Compliance works together with the business and looks to foster relationships that lead to open and honest communication.

The Compliance Department is involved in the Group's KYC procedure and works closely with traders and the Credit Department. Besides its involvement in the KYC procedure, the Compliance Department also provides training to all employees on any Code related matters.

Internal Control Department

The Internal Controls department implemented and maintains the Internal Controls System (ICS) in the Group, covering the trading division globally. The ICS is based on a framework that details the risks and controls for all material business processes of the trading division, and was designed using widely accepted internal control model prescribed by COSO (business process and entity level controls) and COBIT (IT general controls).

The internal control process to create and maintain a framework involves phases of:

- Understanding a process and its objectives;
- Identification and assessment of risks;
- Defining mitigating controls;
- Test of key controls; and
- Remediate test failures.

Periodic measurement and reporting of the Group's ICS is based on these main steps since 2009:

- Management identifies and measures the inherent business risks on an annual basis (financial reporting, operational, and compliance risks);
- Annually, management identifies and adapts the necessary controls and risks considering business changes;
- Quarterly, the key controls are tested to ensure operational effectiveness;
- At the end of the year residual risk is assessed considering the results of the control tests and reported to management;

- Continuously, possible opportunities for improvement identified during the previous steps and review visits are followed up to monitor progress.

The work developed in these phases is managed using the Group's Governance, Risk and Compliance tool called BWise. This tool is not only a repository of the risks and controls but also serves as a means to schedule and review risk assessments and control assessments involving the whole organisation in the internal control framework. External auditors can make use of the framework to gain an understanding of the business processes they are evaluating, and make use of the internal control test results during interim visits to aid their work.

The Internal Controls department also assists local management in improving controls over local risks, and to promote increased standardisation of procedures across the Group by performing targeted and focussed review of processes and/ or locations.

The Internal Controls department, based upon its accumulated knowledge on the business processes, plays a crucial role in assisting management and maintaining an effective control environment whenever a process undergoes a major change such as a new system implementation.

Treasury Department

The Treasury Department is split up across Geneva, Houston, Singapore, Shanghai, Montevideo and Mumbai. The principal objective of the Treasury Department is to handle all cash management activities for the trading business and monitor its cash flows, in particular to report the cash flows and forecasts to the Corporate Funding team who consolidates the information on a Group basis. The Treasury Department also has the responsibility to maintain the integrity of payments. The Treasury Department monitors, on a daily basis, the use of the trading cash including the management of margin calls in relation to the Group's hedging requirements. It is also responsible for reconciling the cash flows to the P&L statements produced by the relevant Deals Desk staff and centralising the Deals Desk reports so that all cash is realised on each deal, as soon as possible.

Corporate Funding Department

The Corporate Funding Department is located in Geneva and Mumbai and is tasked with ensuring that the Group has access to maximum liquidity. Key activities of the department include:

- The monitoring of available cash balances in AAA rated money market funds and main trading accounts;
- Corporate facility utilisation (including, but not limited to, the Group's revolving credit facilities);
- Group liquidity forecast reporting and various inter-group loans relating to both trading and asset divisions, to ensure cash consumption is kept to a minimum, yet allowing each business to trade in an effective manner and anticipating the future liquidity requirements of the various business units on a global basis;
- The production of a monthly Group Capex forecast based on information collected from respective business divisions; and
- Operating and monitoring the securitisation programmes' platforms on a day-to-day basis.

Corporate Affairs Department

The Corporate Affairs department has representatives in Geneva, Montevideo and Houston. The responsibility of the team is twofold: to create and sustain frameworks for an increasingly responsible and effective company, and to protect and promote the business interests and reputation of the Group and its subsidiaries globally. In addition, the group is instrumental in continuing to improve and implement the Group's HSEC business principles.

IT Department

The IT Department is distributed across the main offices around the world with Geneva being the main office. The department's over-arching responsibility centres on the development, support and maintenance of business supporting applications, and underpinning the IT infrastructure.

The Group's core IT functions globally comprise Trading IT, Assets Division, Security and Infrastructure. Together, these functions provide a cohesive and well integrated organisation that supports the Group's Trading and Asset businesses. The Trading IT function is largely outsourced with the majority of the technology and support function based in India. Trading IT also has presence in Moscow and Montevideo.

In order to support the growing business, the Group continues to enhance its enterprise systems adding new modules and enhancing the existing functionality. Significant investment is also underway to upgrade the technical architecture and enable faster integration of future IT systems. Annually, the Group spends around 20-25 per cent. of its overhead budget on IT, which shows the importance of technology to the Group and the value/benefit the Group derives from it.

The core business is captured and managed by the Group's two key bespoke information systems: "Pluto" for the oil business and "Titan" for concentrate products (which replaced the out-going system, "Mercury") and for the refined metals business. Each of these systems offers a fully integrated approach to the Group's needs. As such, every step in the lifecycle of each transaction is generated, executed, monitored and controlled through the related information system, from the time the trader enters the details of the trade, to the allocation of funds received from the customer.

Risk Management

Risk Management and Corporate Responsibility

Prudent risk management is an integral element of the Group's business and has been institutionalised since the Group's foundation. Guidelines are established at senior management level and the Credit and Finance teams retain an absolute veto right on any transaction.

The various risks are managed through a combination of internal procedures, such as strict control mechanisms and policies, as well as external third parties such as the derivative, insurance and bank markets.

Price Risk and Basis Risk

Fundamental principles

The Group's policy is to hedge all index price exposure related to physical transactions on a deal by deal basis. The purpose of the Group's physical hedging activities is to protect the Group against the risk of physical transactions being adversely affected by changes in commodity prices. The Group systematically enters into hedging contracts to cover index price exposures in its physical trading activities. In particular, 100 per cent. of stock is at all times either pre-sold or the commodity index price risk is hedged. Hedges are performed through either futures markets and/or a variety of traded derivatives instruments (e.g. swaps, options).

Beyond that, basis risk cannot be mitigated perfectly. Basis risk in this context is defined as the risk that offsetting investments in a hedging strategy will not experience price changes in entirely opposite directions from each other. This imperfect correlation between the two investments creates the potential for excess gains or losses in a hedging strategy, thus adding risk to the position. The Group, therefore, carefully monitors all its hedging positions on a daily basis, to avoid excessive basis risk.

Concurrently, to the extent that basis movement cannot be eliminated completely, basis risk can be reduced through diversification. In particular, given that basis movements in different commodities are driven by different fundamentals, they are likely to exhibit little correlation. Hence, this provides a natural advantage to a large firm like the Group, which trades a diversified portfolio of commodities.

Price Risk Management

There are two formal committees responsible for different aspects of the Group's market risk management process. The Risk Committee reports to the Management Committee and is tasked with ensuring that the Group is technically and operationally prepared to deal with the risk issues it faces. The Derivatives Trading Committee also reports to the Management Committee and is responsible for applying the Group's risk management capabilities to improving the overall performance of the Group.

The Group's Chief Risk Officer ***("CRO")*** and the risk team work proactively with the trading teams to make the Group's risk management forward looking, by analysing new opportunities and changing market conditions. This team develops computationally intensive non-linear risk simulations and advanced statistical models that incorporate the non-normal market price dynamics that are an important feature of commodity markets. Particular attention is paid to modelling the mean-reverting nature of term structure and inter-commodity spread dynamics. The advanced statistical models developed by the risk team are continuously and automatically calibrated and back-tested to ensure that their out-of-sample performance adheres to well defined targets. In addition, these models are regularly updated to ensure they reflect the current observed dynamics of the markets where the Group is active.

The risk team's models drive the Group's risk reporting system, which automatically distributes customised risk reports throughout the firm on a daily basis. These reports provide up-to-date information on each team's risk using industry standard measures such as 95 per cent. and 99 per cent. Value at Risk (VaR) and performance indicators such as "Sharpe Ratios". VaR is a statistical estimate of the potential loss in value of the Group's positions and unsold in-transit material due to adverse market movements. The Group uses an integrated VaR model which captures risks including commodity prices, interest rates, equity prices and currency rates. This model facilitates comparison of VaR across portfolios comprised of a range of different risk exposures.

The Group's risk reporting system automatically highlights exposures that are nearing their VaR limit and also when 10 per cent., 20 per cent. and 30 per cent. drawdowns occur. VaR limits are reduced when drawdowns occurs. All books have well defined VaR risk limits and management is notified whenever a book nears its risk limit, as well as whenever a VaR overage occurs, resulting in automated emails to the relevant trader, desk managers and the Risk Committee. In addition, the Group's deals desk management team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

For senior management, the daily reports provide a comprehensive view of the Group's risk, classified according to various risk factors. These reports emphasise the risk diversification created by the group's varied activities and highlight any excessive risk concentrations.

Numerous indicators detail how the Group is performing relative to a wide range of benchmarks.

Energy

All futures markets are cash markets meaning that price differences are settled in cash on a daily basis ("**margin calls**") after the payment of an initial margin the day of the trade. Swaps or options are usually traded over the counter ("**OTC**").

Hedges are executed through a number of brokers. The Group works with about ten main clearing brokers. The staff involved performs the equivalent functions as the operations department on the physical side: they receive or issue contracts, receive or issue invoices, control and order payment as well as following receipt of proceeds. The Accounts department is also involved in swap administration as the department is responsible for the reconciliation of positions on a daily basis.

Hedges are performed through a Central Execution Desk by Trafigura Pte. Ltd. Each hedge is individually monitored by the Deals Desk. Most oil contracts become fixed price around the shipment's loading date. Typically one or two days before such date, the Deals Desk liaises with the operations representative in charge in order to estimate the loading (i.e. price fixing) date and start hedging on time. The same applies for other instruments including swaps and geographical spreads (e.g. Brent versus WTI).

As soon as a hedge has been put in place, a deal ticket is created and input into the system. The ticket is either attached to an existing physical deal or a new deal will be created if no such physical deal exists already. All positions are reconciled daily with the brokers' positions by the Accounts department. Cash is settled daily by the Treasury department.

The Collateral Management team is responsible for monitoring counterparty exposures across the OTC swaps and options portfolios. On a daily basis, the mark-to-market positions are cross-referenced against pre-agreed credit thresholds set by the Geneva Credit team at a counterparty level. Excesses are covered

by collateral called in the form of cash or standby letters of credit ("**SBLCs**"). The Collateral Management team handles all margin calls, issued and received.

Another important aspect of the work undertaken by the Credit team is their involvement in the negotiation of various standard Master agreements such as ISDAs and Master Netting Agreements ("**MNAs**"). These documents provide a trading framework for the execution of OTC transactions and are negotiated bilaterally with each counterparty, with the assistance of the Group's Documentation Specialist and the Legal Department.

Each ISDA includes a margin threshold within the Credit Support Annex. These are conservatively set on a case-by-case basis by the Group's Credit department and regularly reviewed. Recent regulatory changes have resulted in reduced OTC trading across the market as positions are increasingly cleared on recognised exchanges.

Metals

In Europe, the main futures market for metals, the London Metals Exchange, is not a cash market. The consequence is that brokers negotiate credit limits with their customers to cover initial and variation margins above which cash is required. In the same manner, customers run a credit exposure on their broker when positions are generating a positive balance.

Hedges are executed by the Metals desk in Geneva at the request of the operations staff when transactions are priced. Hedges are also followed on a transaction-by-transaction basis in the system. However, because pricing periods in metals are typically longer than in oil (one month), the quantity per contract to be hedged on a daily basis is small. This means that the derivative team hedges as a pool on the market, the system splitting such hedges back to each contract. Positions are reconciled by the Group's Metals Derivatives desk with brokers on a daily basis.

This reconciliation shows daily credit exposures the Group has on its brokers as a result of its margin position. Contracts can be moved from one broker to another, if necessary, to reduce such risks.

Metal contracts often contain pricing options which allow the trader to decide on which month pricing will happen (i.e. when the "quotation period" is defined). Such options are sold by the physical department to TPTE at market price in order to provide more transparency in the management and results of such options.

Credit Risk

To manage its credit exposure, the Group uses internal credit limits set up by the Credit department. Credit limits reflect the Group's own appetite for risk and are based on a credit analysis of the client as well as the respective size of the transaction when compared to the Group's balance sheet. Exposures in excess of a credit limit are covered through the insurance or bank markets. Typically this cover is arranged by the Trade Finance/Structured Trade Finance teams.

The Credit department works in complete independence from the trading activities. Credit reviews follow a formal process as described in the Group's Credit Policy document. As part of the annual credit review process, the Credit Department uses the S&P Capital IQ rating model to set internal credit ratings for all credit exposures to counterparties and banks. This model relies on fundamental credit analysis to determine credit ratings, which are expressed using a 26-point letter scale of AAA, AA+, AA, AA- and so forth. The proposed rating forms part of the approval of the credit review and must be supported or modified, with supporting justification, by the credit analyst.

Credit review is undertaken at least annually with smaller credit limits (up to a specified maximum) also being set locally. Larger credit limits are generally approved in Geneva, ultimately by a Credit Committee if required – the Credit Committee meets on an ad-hoc basis and consists of a minimum of three senior finance managers, including the Group's Head of Credit and the CFO. An automated process is instituted where interim reviews of counterparties are conducted when risk triggers are breached, such as ratings agency downgrades, share price declines, adverse publicity etc. Credit limits are set and monitored on an aggregate basis of the Group's worldwide exposure.

Performance and Country Risk

Performance risks are evaluated on a counterparty and country basis. As such, deals are considered on a case by case basis, and performance risks where the exposure is above the Group's appetite limit will be laid off to the bank and insurance markets. Typically, the Group will run an internal analysis to assess the country and political risk, and CEND (Confiscation, Expropriation, Nationalisation and Deprivation) insurance coverage will be contracted for assets that are deemed exposed to country risk above the limit. The Counterparty limit is set to reflect the rating of the counterparty, the extent risk to which mitigation insurance is contracted on the financial and insurance markets and/or collateral obtained to cover excess exposure.

Freight Risk

The hedging of freight costs is managed systematically by the Chartering department. In a time charter scenario, the Group hedges its price risk by referring to a combination of Forward Freight Agreements *("**FFAs**")* and bunker swaps. When the Chartering department chooses the vessel, the Group looks to sell FFAs and buy bunker swaps. This way, if spot charter rates for the vessels fall, the Group is covered as such a fluctuation in price is offset by the difference on the FFAs. Furthermore, the Chartering department enters bunker swaps. This is done with a view to safeguard the Group's price exposure under the following scenarios: spot charter rates remain at the same level, or they go up, but bunker fuel prices rise simultaneously, hence leaving the Group's price assumptions uncertain, unless adequately hedged through bunker swaps.

The procedure between the oil and metals/minerals handling of vessel chartering and the respective risk management strategies are very similar. A combination of FFAs is used to hedge forward freight commitments. Bunker swaps cover forward freight commitments in addition to locking prices for bunkering levels which are required on re-delivery of the vessel at the end of the charter. When a vessel is fixed on the spot market with cargoes, the Chartering department unwinds both of the legs of the hedge for the period that the boat is going to be occupied.

Operational Risk

The Operations department has representatives in key locations around the world and is responsible for a number of tasks including contract issuance and booking of vessels. Operators are also responsible for ensuring that industry, environmental, safety and internal policies and procedures are complied with at all times. Detailed procedure manuals are implemented throughout the Group and all operators receive regular training on operational matters and additional training covering subjects such as contracts, charter parties and clauses, environmental policies and legislation, insurance declarations, reviewing due diligence reports, dealing with claims, and demurrage handling. This ensures that operators are kept up to date with procedural, legal, regulatory and industry changes.

The Group continues to move towards using a younger fleet of vessels, both in terms of time charters and voyage charters, and as such applies a strict vessel vetting procedure which complements insurers' requirements and focuses on the vessel age, classification, Protection & Indemnity club and pollution insurance cover. A similar procedure has also been introduced for both railcar and truck movements. The Group also has a storage procedure which involves full due diligence being undertaken of every proposed storage location including a site visit to the storage location, the tanks or warehouse and its financial position and management. Regular stock analysis is undertaken to avoid losses such as theft and contamination, and each approved location is checked annually to evaluate the on-going situation.

Third Party Asset and Liability and Charterers Liability Risk

The Group maintains a level of inventories for supply efficiency purposes, and to benefit from cash and carry opportunities. The Group's total storage position was USD 13.44 billion as at 30 September 2019 (2018: USD 14.73 billion), although it can vary substantially due to seasonal trading plays in energy as well as forward price structure (contango, backwardation and overall price levels) in both energy and metal. Please note that inventories reported in the Group's financials can be higher as cargoes in transit for which title transfers at discharge port are also considered to be inventories for accounting purposes.

With regards to stock value, inspection reports are regularly received detailing the quality and the quantity stored.

Various global insurance policies provide coverage for both assets and third party liability risks. These are described below:

- Stock Throughput Policy (Oil and Metals);
- Charterers Legal Liability Policy; and
- General Liability and Terminal Operators Liability Policies.

The Stock Throughput Policy covers all declared Oil & Metal goods while subject to transport, shipment or storage. The limit is USD 100 million per event with excess layers providing total coverage of USD 500 million per event.

The Charterers Legal Liability Policy covers legal and contractual liability for property damage and bodily injury (main risks covered: liability for damage to the vessel, bodily injury, damage to property of third parties, damage caused by the cargo, stevedoring, pollution of the environment, general average). The limit is USD 1 billion for any one accident or occurrence.

The General Liability Policy covers bodily injury and property damage incurred by third parties (the policy covers both legal and contractual liability and applies to general liability, employer's liability and product liability). The limit is USD 500 million for any one occurrence with an annual aggregate of USD 500 million for product liability and pollution liability. For the owned terminal assets, the Group also has USD 500 million of Terminal Operators Liability insurance covering the marine operations and potential third party exposures arising from this.

Risk Limits

On the physical side, each transaction has its own P&L, which is set up at the inception of the transaction and remains open over the entire life of the trade. Physical deals are continuously monitored by Deals Desk, which acts entirely independently from the trading business. Each P&L is individually marked-to-market on a daily basis and updated with the actual transaction costs such as purchasing costs, hedging, insurance and financing as these costs become known. On any day, changes of +/- USD 25,000 (in either direction) are reported and explained to senior management, allowing the Group to closely monitor its basis risk.

In addition on the physical side:

- No specific limits are set outside any credit requirements; and
- The head trader on each desk liaises with the respective oil or metals management committee on a daily basis, highlighting current issues and new business opportunities.

On the speculative side:

- In addition to its physical trading business, the Group enters into managed speculative positions which involve spread risk when it identifies price or time differentials between markets and products related to its physical flows. Such speculative positions are continuously monitored and subject to Value at Risk ("**VaR**") and stop-loss limits per position. As a rule, the Group maintains conservative consolidated risk limits and ensures that its overall risk exposure remains well within these limits;
- Strategies are also given specific stop losses (e.g. USD 1 to 2 per barrel), which are monitored by the Deals Desk; and
- Positions are marked-to-market on a daily basis: during volatile periods positions are marked-to-market multiple times during the day. If a stop loss is hit, senior management is notified immediately. A decision is then taken to liquidate or keep the position and set a new stop loss limit.

Market Risk Management Reporting

The Group's CRO is responsible for ensuring that there is a full and accurate awareness of risk throughout the Group and that these risks are professionally analysed and managed. The CRO works closely with the trading teams to make the Group's risk analysis forward looking, particularly by proactively analysing new opportunities and changing market conditions. The CRO ensures that the Group's Management Committee and Board of Directors are aware of these evolving risks and their

financial implications. The CRO also sets the priorities of the risk systems development team so that the Group is able to systematically manage its risks through industry standard measures such as Value at Risk (VaR), in conjunction with computationally intensive non-linear risk simulations and advanced statistical analysis. the Group's CRO reports to the Group's Chief Operating Officer.

Mark to market

Mark-to-market and customised risk reports are produced and automatically distributed on a daily basis to traders and management. The reports aim to show transaction profitability based on the aggregate mark-to-market of all outstanding transactions. Variations are carefully analysed and key items are discussed during weekly Risk Committee meetings (or on ad hoc basis if necessary).

Market Risk and Stress Testing

During the first half of 2020, the average 1-day 95 per cent. value at risk ("**VaR**") was USD 18.1 million, an increase compared to the financial year 2019 (USD 11.6 million), but still well below the Group target of maintaining it below 1 per cent. of Group equity. One of the key component to maintain this VaR at such low levels is the diversification benefits from managing the Group's exposures to a broad range of commodity markets.

VaR reached a record level over the first half of 2020 due to the exceptional volatility in the market over the period, in particular during the month of March, as reflected in the graph included in section "Analysis of the Impact of Declining Oil Prices on Trafigura" – while remaining well below the internal threshold.

All trading books have well-defined VaR risk limits and management is automatically notified whenever a book nears its risk limit, as well as whenever a VaR overage occurs. In addition, the Group's deals desk management team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

The Group's policy is that basis risk should be kept to a minimum. If a trader wants to take on a specific position, he must report in a speculative book where VaR and associated stop losses can more easily be monitored.

Internal Control Systems

The Internal Controls department implemented and maintains the Internal Controls System ("**ICS**") in the Group, covering the trading division globally. The ICS is based on a framework that details the risks and controls for all material business processes of the trading division, and was designed using widely accepted internal control model prescribed by COSO (business process and entity level controls) and COBIT (IT general controls).

The internal control process to create and maintain a framework involves phases of:

- Understanding a process and its objectives;
- Identification and assessment of risks;
- Defining mitigating controls;
- Test of key controls; and
- Remediate test failures.

Periodic measurement and reporting of the Group's ICS is based on these main steps since 2009:

- Management identifies and measures the inherent business risks on an annual basis (financial reporting, operational, and compliance risks);
- Annually, management identifies and adapts the necessary controls and risks considering business changes;
- Quarterly, the key controls are tested to ensure operational effectiveness;
- At the end of the year residual risk is assessed considering the results of the control tests and reported to management;
- Continuously, possible opportunities for improvement identified during the previous steps and review visits are followed up to monitor progress.

The work developed in these phases is managed using the Group's Governance, Risk and Compliance tool called BWise. This tool is not only a repository of the risks and controls but also serves as a means to schedule and review risk assessments and control assessments involving the whole organisation in the internal control framework. External auditors can make use of the framework to gain an understanding of the business processes they are evaluating, and make use of the internal control test results during interim visits to aid their work.

The Internal Controls department also assists local management in improving controls over local risks, and to promote increased standardisation of procedures across the Group by performing targeted and focussed review of processes and/ or locations.

The Internal Controls department, thanks to its accumulated knowledge on the business processes, plays a crucial role in assisting management and maintaining an effective control environment whenever a process undergoes a major change such as a new system implementation.

Group Financing

Funding Model

A key reason for the Group's leading competitive position is its access to capital and liquidity. The Group sources funds from a number of markets including the syndicated bank loan markets, securitisation markets, US private placements, corporate bond markets and through trade finance lines. The strength of the Group's liquidity and access to capital is derived from its unique financing model which is based on three main pillars:

- **Long-term corporate credit facilities:** revolving credit, term loan facilities and capital market issuances that are used to meet liquidity requirements outside of day-to-day activities;
- **Short-term transactional facilities:** uncommitted, secured bilateral trade finance lines are used to finance the day-to-day activities of the Group; and
- **Securitisation:** the Group operates one of the largest trade receivables securitisation programmes in the world, which was established in 2004 (the "**Trade Receivables Securitisation Programme**"). The Trade Receivables Securitisation programme allows the Group to fund its receivables once an invoice has been issued and all the Group's obligations under the contract have been performed. Following the success of the trade receivables securitisation programme, the company launched its first inventory backed securitisation programme in November 2017, leveraging inventories of crude oil and refined metals, and whose structure is similar to repurchase agreements (the "**Inventory Securitisation Programme**").

The main advantage of this financing model is that short-term uncommitted transactional facilities (which finance the daily trading activities) and the securitisation programmes (which finance trade receivables and inventories on a non-recourse basis) are self-liquidating, i.e. they are repaid directly from the proceeds of the underlying transaction.

The Group sources funds from various markets including Europe, Asia Pacific as well as the US and continues to enjoy strong support from a network of around 140 financial institutions, with credit lines of approximately USD 61.5 billion. As of March 2020 end, the Group's top 10 banks provided approximately 48 per cent. of the Group's available bank funding. In order to keep strengthening its funding model, the Group aims to continue diversifying its funding sources in order to ensure the unhindered growth and profitability of its trading divisions and industrial assets, and the maximisation of its liquidity.

Bilateral trade finance lines, borrowing bases and revolving credit facilities make up the majority of the Group's funding. The weighted average maturity of the Group's corporate (non-trade related) credit facilities as at 31 March 2020 was approximately 2.2 years. To mitigate refinancing risk the Group has diversified its long-term funding base to reach different investor groups. Furthermore, under its revolving credit facilities, the Group has extension options in place.

The Group maintains two main revolving credit facilities ("**RCFs**"), an Asian RCF and a European RCF. These are generally refinanced annually. The Group had around USD 59.7 billion of available credit facilities as at 30 September 2019, and USD 61.5 billion as at 31 March 2020.

Long Term Financing

The Group's liquidity requirements outside of those coming from the day-to-day trading activities are financed by committed corporate credit facilities, including the Group's revolving credit, term loan facilities and capital market issuances. The corporate facilities, which amount to approximately 23 per cent. of the Group's total credit facilities, finance requirements such as initial margin deposits and margin calls with hedge brokers and bridge financing of capital expenditure. The majority of the Group's corporate credit facilities are denominated in U.S. Dollars because this is the functional currency of the Group's business. In the Asian RCF, the Group has included a CNH denominated tranche since 2013 to capture the growing offshore RMB liquidity. Similarly, the Group is present in the Japanese domestic syndicated bank loan market since 2012 with a 3-year term facility denominated in JPY (the "**Samurai loan**"). In addition to this, in May 2018, the company raised a Swiss franc senior bond for CHF 165 million priced at 2.25 per cent., with a maturity of 5 years – followed by a second smaller issuance in September 2019 (the "**CHF bonds**"). Finally, over 2018 and 2019, the Group also raised renminbi-denominated bond in total of RMB 2,240 million (c. USD 335 million) in four tranches under its Panda Bond programme, each issuance having a 3-year maturity (with the last tranche issued in May 2019) (the "**Panda Bond programme**").

Historically, the Group has been pro-active in tapping new markets to diversify its funding sources and lengthen the average maturity of its debt profile. Some facilities that completed in recent years, and which are outside of the Group's usual corporate facilities, are outlined below.

November 2017 – The Group launched a tap of its USD 600 million 6.875 per cent. perpetual subordinated bond issued in March 2017, and raised an additional USD 200 million. The bond was consolidated and forms a single series with the initial perpetual securities. This was the Group's third perpetual bond, having issued its first one in April 2013 for USD 500 million and its second one in February 2014 for SGD 200 million. A key feature of these bonds is their equity-like treatment under IFRS accounting standards, improving the balance sheet ratios of the Company. They also extend the maturity of the Group's debt and brought some entirely new investors to the Group, particularly in the Asian market. Those bonds are listed on the Singapore Stock Exchange.

March 2018 – The Group issued its inaugural US Dollar senior bond for USD 400 million with a 5-year maturity, priced at 5.25 per cent.. Despite a volatile market backdrop, the level of 5-year T + 254bps was the tightest credit spread ever achieved by the Company on any senior private or public bonds. The transaction was issued by Trafigura Funding S.A. under its EUR 3 billion European Medium Term Notes (EMTN) programme and is listed on the Irish Stock Exchange.

April/May 2018 – The Group successfully placed two tranches out of a 2.35 billion Renminbi-denominated programme (Panda Bond) approved by the National Association of Financial Market Institutional Investors (NAFMII). In April, the first RMB 500 million tranche was placed in the Interbank Market under a private placement format for a 3-year maturity. It was followed by a second tranche of RMB 500 million in May 2018 with similar terms. With this pioneering transaction the Group became the first international commodity trading company and one of the first non-Chinese corporates to access the domestic renminbi-denominated bond market. This transaction enables the Group to access a deep and diversified pool of Chinese investors comprised of commercial banks, asset managers, insurance companies and securities firms.

May 2018 – The Group issued its inaugural Swiss franc senior bond for CHF 165 million with a 5-year maturity. The bond, priced at 2.25 per cent., i.e. 222bps over the 5-year CHF mid-swap rate of 0.03% at the time. It was issued under the Company's EMTN programme and it is listed on the SIX Swiss Exchange.

September 2018 – The Group successfully issued RMB 700 million bond in China's mainland debt market. This third issuance was part of a RMB 2,350 million Panda Bond programme, which, like the first two tranches issued in April and May 2018, was placed in the Interbank Market under a Private Placement format for a 3-year maturity.

May 2019 – The Group successfully issued a new RMB 540 million bond in China's mainland debt market, with a 3-year maturity. The final coupon significantly tightened since the first tranche issued in April 2018, confirming the strong appetite of the Chinese market for the Group's long-term debt. The total amount raised under the company's Panda Bond programme is c. USD 335 million.

September 2019 – The Group issued a further CHF 55 million 5-year bond into the Swiss retail market, priced at 3.25 per cent. This incremental transaction allowed the company to increase liquidity raised in the Swiss market to CHF 220 million, following its inaugural bond issued in May 2018. By tapping the CHF bond market, the Group succeeded in optimising its long-term funding costs, showing again the benefit of the funding diversification strategy followed by the Group.

March 2020 – The Group raised USD 203 million of notes in the US Private Placement (USPP) market with tenors of 5, 7 and 10 years. It was the fifth issuance of the Group in the USPP market and the second largest in size. The Group achieved its tightest ever all-in financing level with coupons of 4.01% (T+295bps), 4.17% (T+300bps) and 4.60% (T+460bps). Proceeds were used to refinance USD 51.5 million of maturing USPP notes and to support the refinancing of the Group's EUR 550 million bond repaid in April 2020.

Revolving Credit Facilities

Over the last 14 years, the Group has maintained two revolving credit facilities, an Asian RCF and a European RCF. In October 2019, the Group refinanced its Asian RCF and term loan facilities for approximately USD 1.5 billion-equivalent. The facility was oversubscribed and upsized from their initial launch amount of USD 1.0 billion-equivalent, with 27 banks participating in the transactions. It comprises of a 365-day USD revolving credit facility (USD 760 million), a 1-year CNH term loan facility (USD 445 million equivalent) and a 3-year USD term loan facility (USD 300 million). The facility was upsized by USD 130 million-equivalent post-closing via the accordion feature.

In March 2020, the Group refinanced its flagship 365-day European RCF at approximately USD 1.9 billion (subsequently upsized by USD 135 million via the accordion feature). The 365-day ERCF, launched at USD 1,500 million, was very well received by the bank market and closed substantially oversubscribed, allowing the Company to upsize the facility. Similar to previous years, the facility was used to refinance the maturing facility, as well as for general corporate purposes. In addition, the Company decided to exercise the second extension option available on the 3-year tranche of its 2018 ERCF, thereby extending the facility by 365 days and maintaining a 3-year tenor.

Other Corporate Facilities

In March 2020, the Group returned for the fifth time to the Japanese domestic syndicated bank loan market, following the first close in 2012. The Group raised JPY 76.8 billion (c. USD 720 million-equivalent) via a JPY-denominated term loan. In addition to the historical three-year tranche, which the Group has refinanced every two years since 2012, the Group introduced an inaugural five-year tranche. Twenty Japanese financial institutions supported the Samurai loan, demonstrating the continued interest of domestic lenders in the Group's credit. Five new institutions joined the syndicate, while the majority of existing lenders continued to participate and increased their amount invested. This transaction continues to increase the diversification of the Group's funding base and strengthens its banking presence in Asia, in particular in the Japanese domestic lending market.

The Trade Receivables Securitisation Programme

The Group's Trade Receivables Securitisation Programme was launched in November 2004 and enables the Group to fund its receivables once an invoice has been issued and all the Group's obligations under the contract have been performed. The programme currently has ten bank-sponsored conduits. Since most physical transactions are financed on a transactional basis with letters of credit or loans under existing lines, the securitisation of the Group's receivables accelerates the rotation of these existing credit lines, since secured bilateral loans are repaid faster with the programme proceeds following the sale of the receivables. This frees financial resources, enabling the Group to grow existing activities and develop new businesses.

The implementation of the securitisation programme achieved the following objectives:

- Diversify and increase borrowing sources;
- Maximise borrowing base and amount of net financing;
- Benefit from attractive funding costs;
- Create a scalable funding programme that can grow in size as the Group's volume of receivables increases; and

- Extend borrowing maturity.

Over time, the external funding of TSF has increased significantly in size while incorporating a longer term committed funding element, principally through the issuance of Medium Term Notes (MTN), as well as retaining a significant proportion of variable funding purchased by bank-sponsored conduits, reaching USD 4,040.0 million of available external funding as at 31 March 2020.

As a result of the Group's stringent risk management philosophy, the programme has not suffered any write-offs since its inception in November 2004 and has become the largest AAA/Aaa publicly rated securitisation programme of trade receivables in the industry.

In September 2018, TSF issued a new series of public notes (TSF 2018-1) on the US Rule 144A and RegS asset-backed securities (ABS) markets. This was the fifth MTN issuance under the programme. The 3-year tenor USD 500 million of public notes were placed with US and European investors including: USD 185 million floating rate notes (AAA/Aaa) at 1m Libor +73bps, USD 280 million fixed rate notes (AAA/Aaa) Notes at mid-swap +73bps and USD 35 million fixed rate notes (BBB/Baa2) at mid-swap +130bps. The transaction was very well received, with the participation from a total of 32 institutional investors in the fixed and floating rate tranches.

The Inventory Securitisation Programme

Following the success of the Trade Receivables Securitisation Programme, the Group pioneered an Inventory Securitisation Programme in November 2017, renewed yearly since then. Trafigura Commodities Funding Pte Ltd ("**TCF**"), a standalone vehicle was setup in Singapore to raise non-recourse funding backed by inventories of crude and refined metals.

TCF issued USD 410 million of senior variable notes which were placed on a private basis with six financial institutions. The proceeds of the notes enables TCF to purchase crude and refined metals inventories from the Group across twelve jurisdictions in Europe, Middle East and Asia-Pacific – noting that the U.S. became an eligible jurisdiction in early 2020, as part of an amendment process in cooperation with noteholders. The commodities are sold on a 'true sale' basis under a purchase agreement, granting TCF the right to sell each commodity back to the Group at the expiry of the underlying contracts or earlier at the option of the Group.

The transaction architecture addresses risks related to the ownership of the commodities such as price, liquidity, basis risk, damage and theft of goods and storage control. TCF was designed to withstand a potential default of the Group via collateral and liquidation agency agreements.

This platform will enable the Group to become a systematic issuer of notes backed by commodities inventories and ultimately to seek committed term financing in the asset backed securitisation markets.

Transactional Financing

A large proportion of the Group's financing is derived from trade related transactional financing arrangements, which finance day-to-day activities. This involves the financing of individual physical commodity transactions with uncommitted secured bilateral bank lines. The debt created in these transactions is secured on the commodity that is being purchased and the subsequent receivable.

In their most simple form, bilateral trade finance lines are a means of financing physical trading activity whereby a single trade finance bank initially opens up a Letter of Credit in favour of a commodity trader, followed by a loan to the commodity trader once the purchase invoice has been paid, to finance a specific single physical transaction. The loan is repaid by the commodity trader using cash received from the sale of the specific stock being financed. It is important to note that these transactions are self-liquidating in that the debt is repaid from the proceeds of the sale of the commodities (or by the sale of a related receivables).

A key feature of these financial arrangements is that financing is generally provided at 100 per cent. of the value of the underlying assets and adjusted on a weekly basis. In the event of rising prices, the Group marks-to-market the collateral held by the banks, who in turn provides additional liquidity to the Group on a weekly basis or more often if requested by the Group (or vice versa in case of declining prices). Given that the Group hedges its physical trading book, the cash flows on the hedging positions can be matched with the change in value of collateral which are marked-to-market under the corresponding

loans. Without bilateral lines, such liquidity could only be realised at the time of the payment under the final sales contract by the client.

The main advantages of bilateral trade finance lines are as follows:

- **The self-liquidating nature of transactional lines**

Lenders initially retain security over the stock, then over the associated receivable. As cash from the receivable is obtained, the bilateral loan is repaid. As such, loans under bilateral lines are not repaid from cash flow, but rather from the transaction itself.

- **Flexibility**

Bilateral lines are a very flexible form of financing which can be drawn for funding or the issue of credit instruments such as letters of credit and can be easily increased in case of high commodity prices.

- **Reliability**

Banks view bilateral financing favourably and are generally more willing to lend under bilateral lines than other forms of financing. This ensures bilateral lines are a reliable form of financing even in distressed credit markets. Since September 2010, the Group has grown its transactional lines by circa USD 24 billion, with total transactional lines now amounting to over USD 43 billion.

- **Strong liquidity tool**

As transactions are generally 100 per cent. financed and the level of such financings is adjusted on a weekly basis, margin calls can be recovered more quickly.

- **Mark-to-market**

The ability to make weekly drawdowns in transactional secured loans to reflect a change in value of the underlying collateral provides liquidity to balance out margin call requirements on futures positions.

- **Scalability**

Ability to grow lines and to increase/decrease usage according to market conditions and price environment helps the Group react quickly to changing market conditions.

These financing arrangements on an individual transaction basis are only possible with the Group's highly developed and integrated IT systems. Various stages of these transactions need to be monitored and reported to the bilateral banks. The banks involved also need to be able to monitor the transactions and ensure proper management.

Today, the Group is unique among its principal peer group in the way it finances its business activities. It provides the Group with a competitive advantage and has proven to be resilient even during highly volatile market conditions.

The utilisation of the bilateral trade finance lines tracks the underlying oil price. Between September 2014 and September 2015, when average oil prices fell below USD 43/bbl, utilisation of bilateral lines also tapered off. As the Group saw oil prices increasing from early 2016 to mid-2018, the headroom under the trade finance lines contracted. An increase in traded volumes has also been reflected in the increase in utilisation (in USD terms): indeed, since March 2015, traded volumes increased from approximately 2.7 mbpd to 5.9 mbpd on average over the first half of 2020. However, despite the price fluctuations and traded volume increment, the Group has been able to maintain significant headroom in its bilateral lines (albeit with a slower pace of growth in overall size).

The divergence between total short-term transactional lines and net utilisation since early 2018 is testament to the ability of the Group to not only diversify its sources of funding, but also to expand its banking group leading to increasing capacity in short-term transactional lines. Noting that this trend has recently accelerated with the significant drop in oil prices since early 2020.

Transactional Finance compared to Unsecured Lenders

A key point to note is that the Group's use of bilateral trade finance lines does not negatively impact the position of unsecured lenders. Since financing is generally provided at 100 per cent. of the value of the underlying assets and marked to market on a weekly basis, there is no issue of over-collateralisation. This means that no cash (flow), working capital or equity is trapped under the bilateral facilities. In case of an unforeseen problem with the Group, the bilateral lenders would simply liquidate the underlying transaction and as they are financing 100 per cent. of the collateral value, current asset and short-term debt would simply cancel out, i.e. the balance sheet would shrink without any impact on the net working capital (USD 6.7 billion as at 31 March 2020, excluding current assets and liabilities of the securitisation programmes) that is available to the unsecured creditors. This does not include the Group's non-current assets of circa USD 12.5 billion (excluding 'held for sale'), which increased by USD 1.7 billion compared to 30 September 2019, due to the impact of IFRS 16 partly offset by a decrease in equity-accounted investees.

The Group and the Banking Environment

As a privately owned company, the Group secures financing from the banking and debt capital markets. Although the Group (as the rest of the commodity sector) was not completely insulated from past turbulences in the banking environment, the consequences for the Group were limited due to its diversified sources of funding and a very pro-active approach to managing its relationships with its banks.

In 2010 and 2011 during the Eurozone crisis, there was scarce liquidity in the loan markets, particularly for borrowers looking to raise funds denominated in US Dollar. A combination of high commodity prices, with supply of and demand for liquidity polarised, meant borrowers saw pricing creep significantly higher. Between late 2012 and early 2015, steps to restore liquidity (e.g. quantitative easing etc.) and a generally improving banking environment meant loan volumes picked up, which enabled borrowers to (re)finance their facilities at lower pricing, with the increased liquidity resulting in significant oversubscription, allowing borrowers to increase facility sizes and even scale back commitments. Within the industrial and commodity financing spaces, this trend began to tail off in mid- to late- 2015 as the fall in commodity prices and slowing growth in some key markets such as China and Brazil have put pressure on commodity producers and integrated producer/marketers. This understandably caused some nervousness among banks. Since the end of 2016, the stabilisation in oil prices has led to a rise of available credit facilities as shown on the graph below.

In 2020, turbulent markets, amid the Covid-19 pandemic and US-China trade conflict, raised worries about risks to the financial and trading system. Given the scale of recent price movements, attention has naturally turned to the commodities trading sector. This attention was further sharpened by the difficulties experienced by some trading firms, mostly in Singapore. However, large physical commodities trading firms, such as the Group, are playing a central role in managing the inherent financial and other risks that arise in such volatile markets, and smoothing over the disruptions resulting from such supply and demand shocks.

The Group has, and expects to continue to, benefit from the concentration of capital allocation by banks to the top names in the commodity sector and has therefore been able to maintain healthy levels of committed and uncommitted facilities throughout the various banking and commodity market cycles with strong and continued support from its banking partners.

In recognition of the market trends mentioned above, the Group has sought to manage its banking group in the following ways:

Pro-active and Clear Communication with Banks

The Group maintains a clear and open communication channel with banks. At the end of 2012, the Group carried out a survey on members of its lending group to gauge the perception of external stakeholders towards the Group and its operations. A 70 per cent. response rate was achieved, which highlighted key differentiators of the Group in comparison to its peer group and the challenges faced by the Group, as well as the main positive and negative drivers of the Group's reputation with lenders. The study has proved helpful in developing and shaping the Group's communication channels and strategy.

Following the successful engagement in 2012, the Group conducted a further survey in 2015 to gain an improved understanding of the operational and reputational risks and opportunities that the financial community, namely lending stakeholders, ascribes to the commodities sector as a whole and to the Group in particular. The exercise was also used to measure any tangible improvements following the learning outcomes of the 2012 survey. A total of 35 banks, spread across Europe, North America, Asia Pacific and Africa, were contacted for comment regarding various metrics and personal experiences with the Group. Overall, the lenders acknowledged the significance of the Group as a key player in the industry and highlighted its high level of transparency and communication in topics ranging from strategic objectives to risk management and compliance.

In April 2018, the Group commissioned a third assessment with about fifteen of its key relationship lenders and investors to re-evaluate the Group's reputation, as well as to ascertain their opinions on the impact and quality of the Company's reporting suite. The general consensus from respondents was that the Group is seen to act as if it was a 'public company' and is considered to be at the forefront of the responsibility agenda for the sector and decisive in shaping it. The Group's reporting is considered to embody transparency, from a more ambitious Responsibility Report through higher financial transparency in the Annual Report and to industry thought leadership with various white papers such as Commodities Demystified.

The Group values highly this type of feedback and will repeat this exercise in the future, applying recommendations in order to keep shaping and improving its business practices, banking relations and reputation.

Track Record of Building Strong Relationships

For a number of years and throughout various commodity cycles and financial market environments, the Group has cemented strong relationships with its lending banks. Regular meetings are held between the Group's board members and/or management committee members and senior management of the Group's major banks. Top management at those banks have reiterated their commitment to the Group as they re-focus available capital to the leaders of each sector. Therefore, despite a client portfolio rationalisation being undertaken by such banks which has mainly affected non-core and smaller clients in the commodities space, the Group has not suffered any material reduction of available lines and in a number of cases has actually seen available lines increase.

Diversification of Funding Sources

Diversification is a key pillar of the Group's funding strategy. For many years, the Group has actively sought to diversify its banking pool, which now consists of around 140 banks around the world. The Group has developed strong banking relationships on a global basis (e.g. Europe, North America, China, Japan, Australia and South-East Asia). Historically, European banks have been prominent in commodity trade financing and are therefore an important part of the Group's bank group. In the unforeseen case that available credit lines from certain banks were reduced in a specific region, the Group would be in a position to mitigate the effects of such a reduction through corresponding increases of its banking lines in other regions.

Additionally, the Group is in an enviable position to have developed its trade receivables securitisation programme into the largest of the industry. Since this programme is funded from the USD capital markets (whether directly or indirectly via conduits) this significantly reduces the amount of USD liquidity required from its banks in the form of traditional lending. Another milestone was achieved in November 2017, when the company successfully launched its first ever inventory-backed securitisation programme (non-recourse funding), leveraging existing assets and diversifying the funding pool.

The Group has successfully tapped various markets for long-term unsecured funding such as the Eurobond market (2010, 2013, 2014 and 2015), the US private placement market (2006, 2011, 2013, 2018 and 2020) and the hybrid capital market (2013, 2014 and 2017). Additionally, the Group has had a JPY-denominated 3-year term loan since 2012, which it has now re-financed four times (last in March 2020), upsizing the loan each time. Finally, since the beginning of the Group's 2018 fiscal year, the Group has also been active in a number of different markets, tapping new sources of liquidity through senior USD bond, CHF bond and Panda bond.

Financial Discipline

Although unrated by any international rating agency, the Group aims to manage its business and financial profile in a manner consistent with an investment grade profile. The Group has a track record of raising financing from multiple sources on an unrated basis even in the most volatile and challenging market conditions.

Financial discipline is inherent to the Group's business model due to the reliance on debt markets for capital and liquidity. The Group's significant expansion of its sources of financing over the years has been achieved on the basis that the Group can maintain an acceptable and sustainable credit standing consistent with an investment grade profile.

As a private company, the Group values long-term relationships with all its financial stakeholders and provides access to all information necessary to reach an independent view on the Group's creditworthiness. The Group has always strived to disclose to its financial stakeholders information necessary to understand its business model and financial performance. As a testament to this approach, the Group also releases its interim and full year financial reports publically on its website (www.trafigura.com/financials). The Group believes its stakeholders' scrutiny and continuous involvement provide a strong oversight and control on the Group's financial health and is consistent with the Group's strategy to build value in the long run, which is reinforced by its ownership model.

Such discipline is reinforced by the financial covenants granted to the Group's unsecured lenders.

Legal Proceedings

The Company and its subsidiaries are parties to a number of legal claims and proceedings arising out of their business operations. The Group believes that the ultimate resolution of these claims and proceedings will not, in the aggregate, have a material adverse effect on the Group's financial position, consolidated income or cash flows. Such legal claims and proceedings, however, are subject to inherent uncertainties and the outcome of individual matters is unpredictable. It is possible that the Group could be required to make expenditures, in excess of established provisions, in amounts that cannot reasonably be estimated.

As reported in the press, at certain warehouses in China, notably for the locations in Qingdao, Pinglai and Yingkou, there have been rumours that fraudulent warehouse certificates are in circulation. One of the Company's subsidiaries has issued warehouse certificates, and also has a limited number of collateral management agreements in place, regarding metal stored at these locations. Looking at hypothetical yet realistic scenarios, it is still considered unlikely that a potential liability would be material for the Group.

Ownership Structure

The Group is owned by approximately 700 senior employees, who are therefore focused on the long-term success of the business, promoting management depth and stability, and encouraging prudent risk management. The decision as to which employees may become shareholders is discretionary based upon management's evaluation of the individual's performance, seniority and future potential. This assessment is made on a yearly basis, with adjustments up or down, depending on the employee's overall (current and expected) contribution to the Group's results.

Shares are issued and redeemed by TBBV. Upon ceasing employment with the Group, any shares in TBBV held by an employee will be repurchased, under certain conditions. In case of shareholdings in excess of USD 1 million, an employee's shares are bought back in five separate instalments (the first one at the time of departure and then at the end of each of the following four years).

The Group operates a limited discretionary share redemption programme for non-departing employees in order to provide liquidity in the shares and ensure that employees hold shareholding positions commensurate with their overall contribution to the business. However, all share redemptions (for both departing and non-departing employees) are strictly discretionary and can be deferred indefinitely; noting that employees do not have the right to freely sell their shares. Redemptions are strictly subject to the Group maintaining its financial covenants.

Finally, as has been the case since inception, no dividend or profit distribution is paid to final shareholders of the Group other than through share redemptions at TBBV level (noting that, as a first step, dividends are paid from TGPL to TBBV).

Management Structure and Corporate Governance

Board of Directors

As part of the corporate re-organisation described above, there was a change in the Group's governance arrangements. The reason for this is because Singapore law requires locally registered companies to maintain a unitary Board structure. As a consequence, with effect from 30 September 2015, the Group established a single Board of Directors to oversee the Group. The Board of Directors has overall responsibility for the strategic direction and management of the Group across all its investments and activities. This encompasses the roles previously occupied by the Group's two-tier board structure which was comprised of a Supervisory Board and a Board of Directors prior to the Group re-organisation. The Board is chaired by Jeremy Weir, Executive Chairman and CEO. Members of the current Board of Directors are listed below:

BOARD OF DIRECTORS				
Name	**Position**	**Other relevant activities outside the Group (Past or Present)**	**Years with the Group (as at 1 January 2020)**	**Years in Commodities**
Andrew Vickerman	Director	Former member of the Operating and Executive Committees of Rio Tinto; Former Global Head of Communication & External Relations of Rio Tinto	9	28
Jeremy Weir	Executive Chairman and Chief Executive Officer	None	19	27
Jose Larocca	Executive Director and Co-Head of Oil Trading	None	26	28
Mark Irwin	Director	Former Financial and Corporate Controller	26	28
Mike Wainwright	Executive Director and Chief Operating Officer	None	24	24
Pierre Lorinet	Director	Former Group Chief Financial Officer	18	19
Sipko Schat	Director	Former member of Rabobank Executive Board; Non-executive director of various companies	4	4

The business address of each member of the Board of Directors is 10 Collyer Quay, Ocean Financial Centre, #29-00 Singapore 049315. As at the date of this Base Prospectus, to the best of the Company's knowledge, no potential conflicts of interest exist between the duties to the Company of any director, and its private interests and/or other duties.

Management committee

The Management Committee was created in April 2018, subsuming the Trading Committee and Investment Committee. The Management Committee is responsible for the execution of the Group's business plan including management of the day-to-day trading, commercial and operational functions as well as the Group's investment portfolio. Creation of the Management Committee marks a further development of the Group's governance and enlargement of the leadership of the Group. Members of the Management Committee are listed below:

Name	**Position / Background**	**Years with the Group (as at 1 January 2020)**	**Years in Commodities**
Amin Zahir	Head of Refined Metals and Concentrates	19	22
Ben Luckock	Co-Head of Oil Trading	12	22
Christophe Salmon	Group Chief Financial Officer	8	19
Jeremy Weir	Executive Chairman and Chief Executive Officer	19	27
Jesus Fernandez	Head of M&A	15	15
Jose Larocca	Co-Head of Oil Trading	26	28
Julien Rolland	Head of Bulk Minerals, and Power and Renewables Trading	14	23
Mike Wainwright	Chief Operational Officer	24	24

Name	Position / Background	Years with the Group (as at 1 January 2020)	Years in Commodities
Hadi Hallouche	Co-Head of Oil Trading	8	15

Other committees

Below the Management Committee sit a number of more narrowly focused committees which are focused on the day-to-day management of the Group, as opposed to the Group strategy. Each committee maintains regular contact with the Group's Management Committee and Board. They are comprised as follows:

- Oil & Petroleum Trading Committee: Group CEO, Co-Heads of Oil Trading and a group of senior oil traders;
- Metals and Minerals Trading Committee: Group CEO and senior metals and minerals traders;
- Finance Committee: Group CFO, Regional CFOs, Head of Structured & Trade Finance, Group Treasurer, Head of Credit Risk Management and Head of Trade Finance;
- Accounting Steering Committee: Group COO and Group Financial Controller;
- IT Steering Committee: Group COO and other board-level representatives;
- Risk Committee: Group CEO, Group COO, Co-Heads of Oil Trading and Chief Risk Officer;
- Compliance Committee; and
- HSEC Steering Committee.

Corporate Responsibility

The Group has set an important ambition: to become acknowledged sector leaders in the way the Group manages corporate responsibility. This commitment is endorsed by the Group's Management Committee, shareholders and by employees across the Group. It is also firmly rooted in commercial logic, for a number of reasons:

1. The Group knows it has to earn and maintain a social licence to operate in many countries and communities where the Group is active.

2. As a Group specialising in the logistics of moving large volumes of potentially dangerous or polluting materials around the world, it needs to operate a systematic and rigorous approach to the management of Health, Safety, Environment and Community ("**HSEC**") risks, both in operations under direct control and in selection of contracting partners.

3. The Group's partners rightly require assurance that the Group operate to the highest standards. Demonstrating leadership in responsibility will support the development of business and enhance access to capital and liquidity. In that sense, the Group see good performance in this area as a means of securing a competitive edge.

Different parts of the Group have distinct challenges and priorities across the HSEC and compliance agenda. All are required to implement, measure and report performance against the priorities and targets agreed at Group and operating levels.

The Group reports annually on its corporate responsibility performance.

Comprehensive Framework for Responsibility

The sustainability of any policy is contingent on how it is developed, embedded and monitored.

In the 2016 Responsibility Report, the Group described the adoption of a new Corporate Responsibility Policy, together with updated Business Principles covering human rights, health and safety, environment

and community engagement. Publication followed extensive consultation with employees, business partners and other stakeholders. These documents are all available here at www.trafigura.com.

At a strategic level, the Corporate Responsibility Policy articulates the leadership team's priorities and commitments for social and environmental governance. Operationally, it outlines what is expected from everyone in the Group, its divisions and operating companies.

The Group's policy and principles are cognisant of emerging best practice for multinational corporations and in particular with authoritative frameworks such as the UN Guiding Principles on Business and Human Rights (the UNGPs or 'Ruggie Principles'). They also reflect the evolving expectations of many of the stakeholders, from financing institutions to local communities.

The Group's actively encourage business partners and other entities directly linked to the business operations, products and services to align with and implement comparable standards.

2019 Corporate Responsibility Report

Trafigura reports annually on its corporate responsibility performance. In January 2020, the Group published its fifth Responsibility Report which accounts for the Group's 2019 ESG performance. The report presents a practical perspective on how Trafigura is working independently and in collaboration with its many suppliers and counterparts to manage its ESG impacts and Trafigura's progress during the year implementing responsible business practice.

In this fifth Responsibility Report the Group emphasized four areas. First, the safety of those impacted by the Group's operations. Second, the climate change strategy and emissions reporting, reflecting the priorities and principles of the Financial Stability Board's Task Force on Disclosure (TCFD). Third, the Group's growing responsible sourcing programme; and fourth, the company's efforts to enhance transparency and engagement with its stakeholders.

Trafigura's safety performance has continued to improve over the course of 2019. The Group's Lost Time Incident rate fell by 27 per cent. to 1.76 (compared to 2.40 per cent. in 2018), following reductions of 38 per cent. and 12 per cent. in 2018 and 2017 respectively.

Trafigura's reporting of greenhouse gas emissions extended in 2019 to include all activities and the company reported good progress towards reporting emissions intensity.

In 2019, Trafigura eliminated the practice of using intermediaries or agents for business origination and development purposes, an important step expedited by the geographical scale that Trafigura has now reached. The company has continued to strengthen its compliance programme, and the Group's Know-Your-Counterparty (KYC) due diligence programme extended to 8,672 counterparts, up from 6,475 in 2018.

Health, safety and environmental (HSE) diligence by the Group extended to 683 contractors, up from 403 in the previous year and, similarly, Trafigura's responsible sourcing programme expanded significantly, which is noted in the report as 'reflecting a growing industry trend towards enhanced supply chain diligence'. Trafigura has made specific disclosures relevant to its Tailings Storage Facilities, in accordance with the Investor Mining and Tailings Safety Initiative.

In recent years, Trafigura has played an active role in support of commodities trading transparency and, in particular, the Extractive Industries Transparency Initiative (EITI). In 2019, Trafigura became the first commodity trading company to join the board of the EITI. Trafigura is committed to advancing the mission of the organisation and extending its reach internationally. Trafigura's reporting aligned with the EITI related to payments of USD 3.2 billion in 2018 to national oil companies (NOCs) in EITI countries (2017: USD 2.7 billion), against total payments of USD 35.8 billion in 2018 to NOCs in non-EITI countries (2017: USD 30 billion).

HSEC Steering Committee

The Group's HSEC Steering Committee is responsible for ensuring the Corporate Responsibility Policy and Business Principles are implemented consistently across the organisation. It includes a Board member,

the Heads of Corporate Affairs, HSE, and Corporate Responsibility as well as COOs and HSEC Heads from across the organisation.

The Group's HSEC Steering Committee is supported by cross-company HSEC Working Groups, focusing on particular challenges or work programmes.

The mandate of the Group's HSEC Steering Committee is to manage a robust, yet streamlined approach to HSEC issues across the Group with an emphasis on implementation and performance improvement at an operating company and local site level.

Transparency

The Group takes the view that transparency is indispensable in its corporate responsibility journey. There are increasing demands for greater disclosure of payments to governments by commodity trading firms as well as mining companies and upstream oil producers. Disclosure can assist in improving governance in resource-rich countries.

As a major facilitator of global trade, the Group also believe that natural resource wealth should be an important engine for economic growth that contributes to sustainable development and poverty reduction. Being open about how the Group manage natural resources gives the populations in countries where it operate the tools to hold governments and business to account.

Since the Group's first bond issuance on the international debt capital markets in 2010, the Group has taken significant steps to provide greater transparency to stakeholders. The Group believe that driving greater transparency and accountability is in the best interests of those impacted by it activities, whether national governments and their citizens or sector leaders through to small businesses. Transparency is an important pillar of the company's core business and is increasingly viewed both internally and externally as a business enabler and a competitive differentiator.

Extractive Industries Transparency Initiative ("EITI")

In November 2014, the Group formally declared its support to the Extractive Industries Transparency Initiative (EITI) – the first privately held commodities trading company to do so. In a further step, the Group published a 'Payments to Governments Policy', which was drawn up in consultation with the EITI International Secretariat. The policy committed the company to disclosing any payments to National Oil Companies (NOCs) for crude oil and petroleum products, including gas, as well as associated corporate taxes and, where relevant, licence payments to Governments. As a leading commodities trading house, the Group has a role in making such disclosures, and believe that Governments have an important part to play in disclosing how they use these funds. In 2019, the Group became the first commodity trading company to join the board of the EITI.

Health and Safety

Three health and safety objectives determine the Group's approach. First, the Group aims for zero work-related fatalities; second, it aims to reduce the number of serious incidents it experiences; and third, it works to share lessons from incidents and near misses, with a view to continually improving the performance.

The Group's robust, targeted approach is increasingly informed by solid data. The Group is asserting the primary importance of safe, healthy working conditions through strong governance supported by an active network of HSEC practitioners. It aims to eliminate or mitigate operational risks to as low as reasonably practicable, whether they relate to the employees or to others carrying out or overseeing duties on the Group's behalf.

The Group's approach has its foundations in the Corporate Responsibility Policy and Business Principles. The Group is meeting these commitments through strong governance at Group and operating levels. It is strengthening the assurance and formalising the processes. The Group focuses on skills development and risk management, and share good practice across the organisation.

Environment

The Group is entrusted with the safe handling, storage, blending and transportation of significant volumes of commodities every day, including oil and petroleum products, ores, concentrates and refined metals. It is the Group's duty to prevent, minimise or remediate any unintended releases of these products to the natural environment.

The Group's divisions and operating companies that manage industrial assets aim to eliminate or mitigate any adverse environmental impacts associated with their activities. The Group seeks to reduce emissions, explore ways in which it can create supply chain efficiencies in logistics, and adapt the operations to meet the reality of climate change.

In 2019, the Group established the Climate Change Group to guide the strategic approach to climate-related risks and opportunities. Its main priorities for the year were initiating investigations into new opportunities, reviewing existing proposals, examining and challenging the Group's quarterly climate change reports and ensuring the Group is positioned to adapt as the world transitions to a low carbon economy.

Conduct and Compliance

The Group focuses on promoting and sustaining a sound compliance culture where all staff recognise both a personal and a collective responsibility for meeting Group compliance objectives. The Group's Code of Business Conduct defines what is expected of its people.

The Group's business is conducted within national and international laws and regulations. Wherever the Group operates, it aims to ensure its conduct is in line with applicable and relevant internationally recognised standards.

The Group's Code of Business Conduct is a cornerstone of the Group's approach. It defines what is expected of the business and its employees. It promotes good business judgement and compliance with relevant laws and regulations.

Ethical business conduct is a pre-requisite for sustained success. The Group has adopted five key principles that define the way the Company conducts itself worldwide. The Company's Compliance Department has developed global systems and safeguards that ensure the Company adheres to these principles wherever the Group operates.

1. Integrity - honest and straightforward in business dealings.
2. Care and diligence - due skill, care and diligence in the management of its business.
3. Best practice - compliance procedures that meet best practice standards, not just minimum legal or regulatory requirements.
4. Market conduct - business dealings in accordance with high standards of market conduct.
5. Management and control - appropriate procedures in place to manage and control the business effectively and meet the requirements of its Code of Business Conduct.

The Group's Compliance Department oversees Group activities. It operates in partnership with front office functions to ensure the Group's controls are relevant and robust. The Group's Head of Compliance reports directly to the Group's COO who sits on the Group's Management Committee. The Group's Compliance Committee meets twice a year.

Know Your Counterparty Process

The Group is dedicated to forming strong, enduring and mutually beneficial relationships with its customers. Therefore, the Group takes great care in selecting its business partners, a commitment that is clearly articulated within the Company's 'Know Your Counterparty' programme. Before transactions can proceed, a prospective new counterparty must provide extensive information about its operations, directors and financial status. After these details have been analysed by the Group's internal compliance team, the data is verified by authoritative external agencies including Complinet and Dun & Bradstreet.

Following this, the credit department verifies the credit status of the counterparty. Only after these checks are successfully undertaken can the Group enter into transactions with a new counterparty. These responsibilities are shared by a comprehensive compliance plan, monitoring programme and involvement of senior management through Compliance Committees.

Trafigura Foundation

The Trafigura Foundation was established in 2007 to coordinate and support the Company's philanthropy. What began as a handful of projects managed by staff has progressed into a systematic philanthropic organisation with global interests. Today, Trafigura Foundation provides financial and technical support to long-term development programmes that respond to specific local needs and delivers long lasting results. Over the past decades, it has engaged in projects involving around USD 58 million in nearly 100 programmes in 29 countries of operations.

In 2017, the Foundation reframed its strategic orientation to maximise its impact by forging stronger, more strategic relationships. It now focuses on programmes in two areas of activity: Fair and Sustainable Employment and Clean and Safe Supply Chains. Each of these furthers the Foundation's mission of improving the socio-economic conditions of vulnerable communities in countries where the Group has a presence, driving positive and lasting transformational change for those who need it the most. Beside these two focus areas, the Foundation's other mission remains to pool the charitable and community-oriented initiatives of the Group employees around the world.

The Foundation's governance structure ensures decisions are entirely independent and guided by genuine philanthropic motivations. The executive team selects, manages and monitors the programmes to which the foundation grants its support and is led by the Executive Director. The Foundation's Board of accomplished professionals' guides and supports the Foundation in its strategic decisions and investments.

Membership Organisations

In order to facilitate honest and open engagement with stakeholders on a range of social and environmental topics, the Group has joined a number of corporate responsibility initiatives worldwide. Current memberships include:

- UN Global Compact « (UNGC) » at an international level.
- World Economic Forum (WEF) - An international organisation for public-private cooperation engaging political, business and other leaders of society to shape global, regional and industry agendas. The Group is a member of the WEF's Global Battery Alliance.
- Global Maritime Forum: An international not-for-profit foundation dedicated to shaping the future of global seaborne trade to increase sustainable long-term economic development and human wellbeing.
- Global Business Initiative on Human Rights « (GBI) »: A not-for-profit organisation established to advance human rights in the business context by informing policy and promoting cross-industry peer learning, outreach and capacity building.
- Extractive Industries Transparency Initiative « (EITI) » (as mentioned above).
- Oil Spill Response Ltd.
- Other membership includes: International Swaps and Derivative Association, Futures Industry Association, Commodities Markets Council Europe and OECD Multi-Stakeholder Group.
- The Group's participation in these initiatives is enhancing the Company's ability to meet its obligation to respect human rights in practice.

Financial Year

The financial year of the Company ends on 30 September.

Auditors

For the financial years ended 30 September 2018 and 30 September 2019, the auditor of the Company was PricewaterhouseCoopers SA, avenue Giuseppe-Motta 50, 1211 Geneva, Switzerland. PricewaterhouseCoopers SA, Geneva branch, is registered in the commercial register of the Canton of Geneva under number CHE-390.062.005. PricewaterhouseCoopers SA is a member of EXPERTsuisse – Swiss Expert Association for Audit, Tax and Fiduciary.

DESCRIPTION OF THE ISSUER

Business overview

The Issuer is a wholly-owned indirect subsidiary of the Company. The direct shareholder of the Issuer is Trafigura Holdings Pte Ltd. The Issuer is a special purpose financing entity. The corporate objects of the Issuer as set out in its Articles of Incorporation include the taking and maintaining of any participating interests, the granting of assistance to other Group companies or companies in which the Issuer has an interest, the issue of notes, bonds, debentures and any kind of debt and/or equity securities in any form and the granting of security interests over all or some of the Issuer's assets. The Issuer has no material business operations, no direct subsidiaries and no employees.

The Issuer is a wholly-owned finance company for the Group and its principal purpose is to issue debt instruments in the capital markets and lend the proceeds arising therefrom to members of the Group (although principally the lending is to TPTE, which performs treasury functions for the Group). The Issuer is dependent upon the members of the Group to which it lends to repay such loans in order to service the Notes. The Notes also benefit from guarantees of certain other members of the Group.

The Issuer is a limited liability company (*société anonyme*) incorporated and existing under the laws of the Grand Duchy of Luxembourg under the name Trafigura Funding S.A. The Issuer was incorporated on 13 December 2012. The Issuer is registered in Luxembourg with the Registre de Commerce et des Sociétés under number B 173718. The registered office of the Issuer is at 21, rue du Puits Romain, L-8070 Betrange, Grand Duchy of Luxembourg and its telephone number is +352 (26) 73 021. The Issuer was incorporated for an indefinite duration and has no other commercial name. There have been no recent events particular to the Issuer which are relevant to the evaluation of the Issuer's solvency.

Members of the Board of Directors

The directors of the Issuer as at the date of this Base Prospectus are as follows:

Name	Position	Other Principal Activities (outside the Group)
Edward Riley	Class A Director	None
Christopher Salmon	Class A Director	None
Robbert Maas	Class A Director	None
Constance Collette	Class B Director	Director of Estera (Luxembourg) S.àr.l.; various non-executive positions
Rémy Cornet	Class B Director	Director of Estera (Luxembourg) S.àr.l.; various non-executive positions

The business address of each of the Issuer's directors is 21, rue du Puits Romain, L-8070 Betrange, Grand Duchy of Luxembourg.

As at the date of this Base Prospectus, to the best of the Issuer's knowledge, no potential conflicts of interest exist between the duties to the Issuer of any director, and its private interests and/or other duties.

Financial Year

The financial year of the Issuer ends on 30 September.

Auditors

For the financial years ended 30 September 2018 and 30 September 2019, the auditor of the Issuer was PricewaterhouseCoopers, Société coopérative, whose registered office is at 2, rue Gerhard Mercator, L-

2182 Luxembourg. PricewaterhouseCoopers, Société coopérative is a member of the Luxembourg Institute of Auditors (*Institut des Réviseurs d'Entreprises*).

DESCRIPTION OF TRAFIGURA TRADING LLC

Business overview

TTL is a wholly-owned indirect subsidiary of the Company. TTL is engaged in buying and selling commodities, with its principal office in Houston (Texas) and another branch office in Stamford (Connecticut). TTL is the member of the Group responsible for conducting business in the United States.

TTL is a limited liability company incorporated under the laws of the State of Delaware under the name Trafigura Trading LLC. TTL was incorporated on 31 January 2015. TTL is registered in the State of Delaware with Federal Identification Number 06-1436098. The registered office of TTL is at 1209 Orange Street, Wilmington, New Castle County, Delaware 19801 and its telephone number is +1 832 2036400. The principal place of business of TTL is at 5 Houston Centre, 1401 McKinney, Suite 1500, Houston, Texas 77010. TTL was incorporated for an indefinite duration and has no other commercial name. There have been no recent events particular to TTL which are relevant to the evaluation of TTL's solvency.

TTL was previously incorporated on 14 July 1995 as a limited liability company existing under the laws of Switzerland under the name Trafigura AG. On 31 January 2015, TTL re-domesticated as a Delaware corporation under the name of Trafigura Inc. and subsequently converted to a limited liability company incorporated under the laws of the State of Delaware and changed its name to Trafigura Trading LLC (the (the "**Re-domestication**").

Management

The management of TTL as at the date of this Base Prospectus are as follows:

Name	Position	Other Principal Activities (outside the Group)
Corey Prologo	President/Director	None
Rodney Malcolm	President /Director	None

The business address of each of TTL's directors is Houston Center, 1401 McKinney, Suite 1500, Houston, TX 77010, USA and One Stamford Plaza, 263 Tresser Boulevard, 16th Floor, Stamford CT06901, USA respectively.

As at the date of this Base Prospectus, to the best of TTL's knowledge, no potential conflicts of interest exist between the duties to TTL of any director, and its private interests and/or other duties.

Financial Year

The financial year of TTL ends on 30 September.

Auditors

For the financial year ended 30 September 2018 and 30 September 2019, the auditor of TTL was PricewaterhouseCoopers SA, Geneva Branch whose registered office is at avenue Giuseppe-Motta 50, 1211 Geneva, Switzerland. PricewaterhouseCoopers SA, Geneva branch, is registered in the commercial register of the Canton of Geneva under number CHE-390.062.005. PricewaterhouseCoopers SA is a member of EXPERTsuisse – Swiss Expert Association for Audit, Tax and Fiduciary.

DESCRIPTION OF TRAFIGURA PTE LTD

Business overview

TPTE is a wholly-owned indirect subsidiary of the Company and is a Singaporean corporation engaged in buying and selling oil commodities in the Far East. TPTE was established in Singapore as the regional headquarters for the Group's oil trading activities, is the focal point for Trafigura's Asian branch network which includes offices in Brisbane, Jakarta, Mumbai, Seoul, Shanghai, Singapore, Tokyo and Ulaanbaatar and is the principal entity through which the Group's trading transactions are booked.

TPTE is a limited private company incorporated and existing under the laws of Singapore under the name Trafigura Pte Ltd. TPTE was incorporated on 7 March 1996. TPTE is registered in Singapore with the Accounting and Corporate Regulatory Authority in Singapore under number 199601595D. Its registered office and principal place of business is at 10 Collyer Quay, #29-00 Ocean Financial Centre, Singapore 049315 and its telephone number is +65 6319 2960. TPTE was incorporated for an indefinite duration and has no other commercial name. There have been no recent events particular to TPTE which are relevant to the evaluation of TPTE's solvency.

Members of the Board of Directors

The directors of TPTE as at the date of this Base Prospectus are as follows:

Name	Position	Other Principal Activities (outside the Group)
William John Jaede	Director	None
Nicolas Marsac	Director	None
Edmundo Abdon Vidal Cornelio	Director	None
Chin Hwee Tan	Director	None

The business address of each of TPTE's directors is 10 Collyer Quay, #29-00 Ocean Financial Centre, Singapore 049315. As at the date of this Base Prospectus, to the best of TPTE's knowledge, no potential conflicts of interest exist between the duties to TPTE of any director, and its private interests and/or other duties.

Financial Year

The financial year of TPTE ends on 30 September.

Auditors

For the financial years ended 30 September 2018 and 30 September 2019, the auditor of TPTE was PricewaterhouseCoopers LLP, whose registered office is at 7 Straits View, Marina One, East Tower, Level 12, Singapore 018936. PricewaterhouseCoopers LLP are registered as Public Accountants and Certified Public Accountants with the Accounting and Corporate Regulatory Authority in Singapore.

TAXATION

The following is a general description of certain tax considerations relating to the Notes. It does not purport to be a complete analysis of all tax considerations relating to the Notes, whether in those countries or elsewhere. Prospective purchasers of Notes should consult their own tax advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing of Notes and receiving payments of interest, principal and/or other amounts under the Notes and the consequences of such actions under the tax laws of those countries. This summary is based upon the law as in effect on the date of this Base Prospectus and is subject to any change in law that may take effect after such date.

Luxembourg Taxation

Please note that a reference to Luxembourg income tax encompasses corporate income tax (*impôt sur le revenu des collectivités*), municipal business tax (*impôt commercial communal*), a solidarity surcharge (*contribution au fonds pour l'emploi*) as well as personal income tax (*impôt sur le revenu*) generally. Investors may further be subject to net wealth tax (*impôt sur la fortune*) as well as other duties, levies or taxes. Corporate income tax, municipal business tax as well as the solidarity surcharge invariably apply to most corporate taxpayers resident in Luxembourg for tax purposes. Individual taxpayers are generally subject to personal income tax and, the solidarity surcharge. Under certain circumstances, where an individual taxpayer acts in the course of the management of a professional or business undertaking, municipal business tax may apply as well.

Luxembourg tax residency of Noteholders

A Luxembourg non-resident Noteholder will not become resident, nor be deemed to be resident, in Luxembourg, by reason only of its holding of Notes, or the execution, performance, delivery and/or enforcement of its entitlements thereunder.

Withholding tax

In principle, Luxembourg does not levy a withholding tax on at-arm's-length interest, except for interest on certain profit sharing bonds or similar instruments and interest paid as a profit share under certain silent partnership type arrangements, subject to the application of the Luxembourg law dated 23 December 2005, as amended (the " **Relibi Law**").

Luxembourg non-resident individuals

Under the Luxembourg tax law currently in effect, there is no withholding tax on payments of interest (including accrued but unpaid interest) that are not profit sharing and other similar income made to a Luxembourg non-resident holder of the Notes. There is also no Luxembourg withholding tax, upon repayment of the principal, or subject to the application of the Relibi Law, upon redemption or exchange of the Notes.

Luxembourg resident individuals

Under the Relibi Law, payments of interest or similar income made or ascribed by a paying agent established in Luxembourg to or for the immediate benefit of an individual beneficial owner who is a resident of Luxembourg or a foreign residual entity, as defined by the Relibi Law, that secures interest payments on behalf of such individuals (unless such entity has opted to be treated as an undertaking for collective investments in transferable securities (UCITS) recognised in accordance with the Council Directive 85/611/EEC, as replaced by the European Council Directive 2009/65/EC (as amended), or for the exchange of information regime) will be subject to a withholding tax of 20 per cent. Such withholding tax will be in full discharge of income tax if the beneficial owner is an individual acting in the course of the management of his/her/its private wealth. Responsibility for the withholding of the tax will be assumed by the Luxembourg paying agent.

Pursuant to the Relibi Law, Luxembourg resident individuals, acting in the course of their private wealth, can opt to self-declare and pay a 20 per cent. tax on interest payments made by paying agents located in a Member State other than Luxembourg or a member state of the European Economic Area.

Taxation of Noteholders

Taxation of Luxembourg resident individuals

Luxembourg resident individual Noteholders acting in the course of managing their private wealth are subject to Luxembourg income tax at progressive rates in respect of payments received under the Notes, except if (i) a final withholding tax has been levied on such payments or, (ii) where available, the Noteholder opts to self-declare and pay a 20 per cent. tax (see the above section "*Withholding tax – Luxembourg resident individuals*"). A gain realised by a Luxembourg resident individual Noteholder acting in the course of managing its private wealth, upon the sale or disposal of the Notes is not subject to Luxembourg income taxes **provided that** the sale or disposal took place more than six months after the Notes were acquired. However, any portion of such gain corresponding to accrued but unpaid interest income is subject to Luxembourg income tax, except if tax has been levied on such interest in accordance with the Relibi Law.

Luxembourg resident individual Noteholders acting in the course of managing a professional or business undertaking to which the holding of Notes is connected are required to include any remuneration received, as well as any gain realised on the sale or disposal of the Notes, in their taxable income for Luxembourg income tax assessment purposes (including income tax levied at progressive rates and municipal business tax). For Luxembourg resident individuals receiving payments under the Notes as income from assets held in a professional capacity, the 20 per cent. withholding tax levied is credited against their final tax liability. The same tax treatment applies to non-resident Noteholders who have a permanent establishment or a permanent representative in Luxembourg to which the holding of Notes is connected.

Taxation of Luxembourg corporate residents

Luxembourg corporate Noteholders must include any payments received in connection with their holding of Notes and any gain realised on the sale or disposal of the Notes in their taxable income for Luxembourg income tax assessment purposes (including corporate income tax and municipal business tax).

Taxation of Luxembourg corporate residents benefiting from a special tax regime

Luxembourg corporate resident Noteholders that benefit from a special tax regime, including but not limited to (i) undertakings for collective investment subject to the law dated 17 December 2010 (as amended), (ii) specialised investment funds subject to the law dated 13 February 2007 (as amended), (iii) family wealth management companies subject to the law dated 11 May 2007 (as amended), and (iv) reserved alternative investment funds subject to the law dated 23 July 2016 and treated as a specialised investment fund for Luxembourg tax purposes, are exempt from income tax in Luxembourg and thus income derived from the Notes, as well as any gains realised thereon, are not subject to Luxembourg income tax.

Taxation of non-resident Noteholders

Noteholders who are non-residents of Luxembourg and who have neither a permanent establishment nor a permanent representative in Luxembourg to which the holding of Notes is connected are not liable for any Luxembourg income tax, whether they receive payments of principal or other payments or realise capital gains upon the redemption, sale or exchange of any Notes.

Noteholders who are non-residents of Luxembourg and who have a permanent establishment or a permanent representative in Luxembourg to which the holding of Notes is connected are required to include any interest accrued or received under the Notes and any capital gain realised on the sale or disposal of the Notes in their taxable income for Luxembourg income tax assessment purposes.

Net Wealth Tax

Individuals

Net wealth tax will not be levied on an individual Noteholder in respect of its holding of Notes, whether or not he/she is resident of Luxembourg.

Corporations

Corporate Luxembourg resident Noteholders or non-resident Noteholders which maintain a permanent establishment, fixed place of business or a permanent representative in Luxembourg to which the holding of Notes or any resulting income is connected, are subject to an annual Luxembourg net wealth tax on such Notes except if the Noteholder is (i) an undertaking for collective investment subject to the law dated 17 December 2010 (as amended), (ii) a securitisation vehicle governed by the law dated 22 March 2004 on securitisation (as amended), (iii) a company governed by the law dated 15 June 2004 on venture capital vehicles (as amended), (iv) a specialised investment fund subject to the law dated 13 February 2007 (as amended), (v) a family wealth management company subject to the law dated 11 May 2007 (as amended) , or (vi) a reserved alternative investment fund subject to the law dated 23 July 2016.

Net wealth tax is levied at a 0.5 per cent. rate up to EUR 500 million taxable base and at a 0.05 per cent. rate on the taxable base in excess of EUR 500 million. Securitisation vehicles and investment companies in risk capital (*Société d'investissement en capital à risque* (SICAR)), a regulated structure designed for private equity and venture capital investments (organised as tax opaque companies), are subject to net wealth tax up to the amount of the minimum net wealth tax.

The minimum net wealth tax is levied on companies having their statutory seat or central administration in Luxembourg. For entities for which the sum of fixed financial assets, receivables against related companies, transferable securities and cash at bank exceeds 90 per cent. of their total gross assets and EUR 350,000, the minimum net wealth tax is currently set at EUR 4,815. For all other companies having their statutory seat or central administration in Luxembourg which do not fall within the scope of the EUR 4,815 minimum net wealth tax, the minimum net wealth tax ranges from EUR 535 to EUR 32,100, depending on the company's total gross assets.

Other taxes

Registration taxes and stamp duties

There is no Luxembourg registration tax, stamp duty or any other similar tax or duty payable in Luxembourg by the Noteholders as a consequence of the issuance of the Notes, nor will any such taxes be payable as a consequence of a subsequent transfer, redemption or repurchase of the Notes. There is no obligation to register the Notes in Luxembourg. However, a registration duty may apply (i) upon voluntary registration of the Notes in Luxembourg, (ii) if the Notes are attached as an annex to an act (*annexés à un acte*) that itself is subject to mandatory registration, or (iii) if the Notes are deposited in the minutes of a notary (*déposés au rang des minutes d'un notaire*).

Value added tax

There is no Luxembourg value added tax payable in respect of payments in consideration for the issuance of the Notes or in respect of payments made under the Notes or the transfer of the Notes. Luxembourg value added tax may, however, be payable in respect of fees charged for certain services rendered to the Issuer, if for Luxembourg value added tax purposes such services are rendered or are deemed to be rendered in Luxembourg and an exemption from Luxembourg value added tax does not apply with respect to such services. Due to the activity of the Issuer, this value added tax could be a final cost. Foreign value added tax that might be payable in respect of fees charged for certain services rendered to the Issuer may also be a final cost.

Inheritance tax and gift tax

No estate or inheritance taxes are levied on the transfer of the Notes upon death of a Noteholder in cases where the deceased was not a resident of Luxembourg at the time of his death for inheritance tax purposes. Where a Noteholder is a resident of Luxembourg for tax purposes at the time of his death, the Notes are included in his taxable estate for inheritance tax assessment purposes. Gift tax may be due on a gift or donation of Notes if embodied in a Luxembourg notarial deed or otherwise recorded in Luxembourg.

Common Reporting Standard

The Organisation for Economic Co-operation and Development has developed a new global standard for the automatic exchange of financial information between tax authorities (the "**CRS**"). Luxembourg is a

signatory jurisdiction to the CRS and the CRS has been implemented in Luxembourg via the law dated December 18, 2015, concerning the automatic exchange of information on financial accounts and tax matters and implementing the EU Directive 2014/107/EU.

The regulations may impose obligations on the Issuer and the Noteholders, if the Issuer is considered as a Reporting Financial Institution (e.g. an Investment Entity) under the CRS, so that the latter could be required to conduct due diligence and obtain (among other things) confirmation of the tax residency, tax identification number and CRS classification of Noteholders in order to fulfil its own legal obligations. Further, the Noteholders have permitted the Issuer to share such information with the relevant taxing authority.

Prospective Noteholders should contact their own tax advisers regarding the application of CRS to their particular circumstances.

The proposed financial transactions tax ("FTT")

On 14 February 2013, the European Commission published a proposal (the "**Commission's proposal**") for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (each other than Estonia, a "**participating Member State**"). However, Estonia has ceased to participate.

The Commission's proposal has very broad scope and could, if introduced, apply to certain dealings in Notes (including secondary market transactions) in certain circumstances. The issuance and subscription of Notes should, however, be exempt.

Under the Commission's proposal, FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the Commission's proposal remains subject to negotiation between participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate.

Prospective holders of the Notes are advised to seek their own professional advice in relation to the FTT.

SUBSCRIPTION AND SALE

Notes may be sold from time to time by the Issuer to any one or more of Citigroup Global Markets Europe AG, Citigroup Global Markets Limited, Credit Suisse Securities (Europe) Limited, Deutsche Bank Aktiengesellschaft, ING Bank N.V. and Société Générale (the "**Dealers**"). The arrangements under which Notes may from time to time be agreed to be sold by the Issuer to, and subscribed by, the Dealers are set out in an amended and restated dealer agreement dated 11 September 2020 (the "**Dealer Agreement**") and made between the Issuer, the Guarantors and the Dealers. If in the case of any Tranche of Notes the method of distribution is an agreement between the Issuer, the Guarantors and a single Dealer for that Tranche to be issued by the Issuer and subscribed by that Dealer, the method of distribution will be described in the relevant Final Terms as "Non-syndicated" and the name of that Dealer and any other interest of that Dealer which is material to the issue of that Tranche beyond the fact of the appointment of that Dealer will be set out in the relevant Final Terms. If in the case of any Tranche of Notes the method of distribution is an agreement between the Issuer, the Guarantors and more than one Dealer for that Tranche to be issued by the Issuer and subscribed by those Dealers, the method of distribution will be described in the relevant Final Terms as "Syndicated", the obligations of those Dealers to subscribe the relevant Notes will be joint and several and the names and addresses of those Dealers and any other interests of any of those Dealers which is material to the issue of that Tranche beyond the fact of the appointment of those Dealers (including whether any of those Dealers has also been appointed to act as stabilising manager in relation to that Tranche) will be set out in the relevant Final Terms.

Any such agreement will, *inter alia*, make provision for the form and terms and conditions of the relevant Notes, the price at which such Notes will be subscribed by the Dealer(s) and the commissions or other agreed deductibles (if any) payable or allowable by the Issuer in respect of such subscription. The Dealer Agreement makes provision for the resignation or termination of appointment of existing Dealers and for the appointment of additional or other Dealers either generally in respect of the Programme or in relation to a particular Tranche of Notes. The Dealers are entitled in certain circumstances to be released and discharged from their obligations under any such agreement prior to the closing of the issue of the Notes.

Certain of the Dealers and their respective affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform services for, the Issuer and their affiliates in the ordinary course of business. In addition, in the ordinary course of their business activities, the Dealers and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Issuer or Issuer's affiliates. Certain of the Dealers or their respective affiliates that have a lending relationship with the Issuer routinely hedge their credit exposure to the Issuer consistent with their customary risk management policies. Typically, such Dealers and their respective affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in securities, including potentially the Notes issued under the Programme. Any such short positions could adversely affect future trading prices of Notes issued under the Programme. The Dealers and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

United States of America: *Regulation S Category 2; TEFRA D or TEFRA C as specified in the relevant Final Terms or neither if TEFRA is specified as not applicable in the relevant Final Terms*.

Neither the Notes nor the Guarantees have been and will not be registered under the Securities Act or with any securities regulatory authority of any state or other jurisdiction of the United States and may not be offered, sold or delivered within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S) except in certain transactions exempt from the registration requirements of the Securities Act. Accordingly, Notes and the Guarantees are being offered and sold only to non-US persons outside the United States in reliance upon Regulation S under the Securities Act.

Subject to sub-clause (a) of the previous paragraph, each Dealer has agreed that, except as permitted by the Dealer Agreement, it will not offer, sell or deliver Notes, (i) as part of their distribution at any time or (ii) otherwise until 40 days after the completion of the distribution of the Notes comprising the relevant Tranche, as certified to the Principal Paying Agent or the Issuer by such Dealer (or, in the case of a sale of

a Tranche of Notes to or through more than one Dealer, by each of such Dealers as to the Notes of such Tranche purchased by or through it, in which case the Principal Paying Agent or the Issuer shall notify each such Dealer when all such Dealers have so certified) within the United States or to, or for the account or benefit of, U.S. persons, and such Dealer will have sent to each dealer to which it sells Notes during the distribution compliance period relating thereto a confirmation or other notice setting forth the restrictions on offers and sales of the Notes within the United States or to, or for the account or benefit of, U.S. persons.

In addition, until 40 days after the commencement of the offering of Notes comprising any Tranche, any offer or sale of Notes within the United States (other than in accordance with the first paragraph under the heading "*United States of America*") by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act.

Prohibition of Sales to EEA and UK Retail Investors

Unless the Final Terms (or Drawdown Prospectus, as the case may be) in respect of any Notes specifies the "Prohibition of Sales to EEA and UK Retail Investors" as "Not Applicable", each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Base Prospectus as completed by the Final Terms (or are the subject of the offering contemplated by a Drawdown Prospectus, as the case may be) in relation thereto to any retail investor in the European Economic Area and the United Kingdom. For the purposes of this provision:

(a) the expression "retail investor" means a person who is one (or more) of the following:

  (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or

  (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended or superseded) where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

Selling Restrictions Addressing Additional Securities Law

United Kingdom

Each Dealer has represented, warranted and agreed that:

(a) ***No deposit-taking:*** in relation to any Notes having a maturity of less than one year:

  (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and:

  (ii) it has not offered or sold and will not offer or sell any Notes other than to persons:

    (A) whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses; or

    (B) who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses,

  where the issue of the Notes would otherwise constitute a contravention of Section 19 of the FSMA by the Issuer;

(b) ***Financial promotion:*** it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which section 21(1) of the FSMA does not apply to the Issuer or the Guarantors; and

(c) ***General compliance***: it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.

Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 of the Commonwealth of Australia (the "Corporations Act")) in relation to the Programme or the Notes has been, or will be, lodged with the Australian Securities and Investments Commission ("ASIC" ") or any other regulatory authority in Australia. Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that (unless the applicable Final Terms or another supplement to this Base Prospectus otherwise provides) it:

(a) has not (directly or indirectly) offered, and will not offer for issue or sale and has not made or invited, and will not make or invite, applications for issue, or offers to purchase, the Notes in or to the Commonwealth of Australia (including an offer or invitation which is received by a person in the Commonwealth of Australia); and

(b) has not distributed or published, and will not distribute or publish, this Base Prospectus or any other offering material or advertisement relating to any Notes in the Commonwealth of Australia,

unless:

(i) the aggregate consideration payable by each offeree or invitee is at least A$500,000 (or its equivalent in other currencies, in either case disregarding moneys lent by the offeror or its associates) or the offer or invitation otherwise does not require disclosure to investors in accordance with Part 6D.2 or Part 7.9 of the Corporations Act;

(ii) the offer or invitation is not made to a "retail client" as defined for the purposes of section 761G of the Corporations Act;

(iii) such action complies with all applicable laws, regulations and directives; and

(iv) such action does not require any document to be lodged with ASIC or any other regulatory authority in Australia.

Belgium

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that an offering of Notes may not be advertised to any individual in Belgium qualifying as a consumer within the meaning of Article I.1 of the Belgian Code of Economic Law, as amended from time to time (a "**Belgian Consumer**" and that it has not offered, sold or resold, transferred or delivered, and will not offer, sell, resell, transfer or deliver, the Notes, and that it has not distributed, and will not distribute, any prospectus, memorandum, information circular, brochure or any similar documents in relation to the Notes, directly or indirectly, to any Belgian Consumer.

Denmark

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold and will not offer, sell or deliver any of the Notes directly or indirectly in the Kingdom of Denmark by way of a public offering, unless, as applicable, in compliance with the Prospectus Regulation, the Danish Consolidated Act No. 931 of 6 September 2019 on Capital Markets, as amended, supplemented or replaced from time to time and any Executive Orders issued thereunder, including the Executive Order No. 1580 of 17 December 2018, as amended, supplemented or replaced from time to time, issued pursuant to the Danish Financial Business Act.

France

Each of the Dealers has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree that:

(i) Offer to the public in France:

it has only made and will only make an offer of Notes to the public in France in the period beginning on the date of notification to the *Autorité des marchés financiers* (the "**AMF**") of the approval of the prospectus relating to those Notes by the competent authority of a Member State of the European Economic Area, other than the AMF, all in accordance with articles L.412-1 and L.621-8 of the French Code *monétaire et financier* and the *Règlement general* of the AMF and ending at the latest on the date which is 12 months after the date of the approval of this Base Prospectus; or

(ii) Private placement in France:

it has not offered or sold and will not offer or sell, directly or indirectly, Notes to the public in France, and it has not distributed or caused to be distributed and will not distribute or cause to be distributed to the public in France, the Base Prospectus, the relevant Final Terms or any other offering material relating to the Notes and such offers, sales and distributions have been and will be made in France only to (a) providers of investment services relating to portfolio management for the account of third parties (*personnes fournissant le service d'investissement de gestion de portefeuille pour compte de tiers*), and/or (b) qualified investors (*investisseurs qualifiés*) acting for their own account, and/or (c) a limited circle of investors (*cercle restreint*) acting for their own account, as defined in, and in accordance with, Articles L. 411-1, L. 411-2, D. 411-1 and D. 411-4 of the French Code monétaire et financier.

Germany

Each Dealer has represented and agreed, and any further Dealer appointed under the programme will be required to represent and agree, that the Notes have not been and will not be offered, sold or publicly promoted or advertised by it in the Federal Republis of Germany other than in compliance with the Prospectus Regulation, the German Securities Prospectus Act (*Wertpapierprospektgesetz*), as amended, or any other laws applicable in the Federal Republic of Germany governing the issue, offering, sale and distribution of securities.

Hong Kong

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

(a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes (except for Notes which are a "structured product" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong) other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance; and

(b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Republic of Italy

The offering of the Notes has not been registered with the *Commissione Nazionale per le Società e la Borsa* ("**CONSOB**") pursuant to Italian securities legislation and, accordingly, no Notes may be offered, sold or delivered, nor may copies of this Base Prospectus (including, without limitation, any supplement to this Base Prospectus) or of any other document relating to the Notes be distributed in the Republic of Italy, except:

(i) to qualified investors (*investitori qualificati*), as in Article 2, letter e) of Regulation (EU) 2017/1129 (the "**Prospectus Regulation**"), pursuant to Article 1, fourth paragraph, letter a) of

the Prospectus Regulation and in Article 100 of Legislative Decree No. 58 of 24 February 1998; or

(ii) subject as provided under "*Prohibition of sales to EEA and UK Retail Investors*" above, in any other circumstances which are exempted from the rules on public offerings pursuant to Article 1 of the Prospectus Regulation and any other applicable Italian laws and regulations.

Any such offer, sale or delivery of the Notes or distribution of copies of this Base Prospectus or any other document relating to the Notes in the Republic of Italy must be in compliance with the selling restriction under paragraph (i) or (ii) above and:

(a) be made by investment firms, banks or financial intermediaries permitted to conduct such activities in the Republic of Italy in accordance with the relevant provisions of Legislative Decree No. 58 of 24 February 1998, CONSOB Regulation No. 20307 of 15 February 2018 and Legislative Decree No. 385 of 1 September 1993 (the "**Banking Act**") (in each case, as amended from time to time) and any other applicable laws or regulations;

(b) comply with Article 129 of the Banking Act and the implementing guidelines of the Bank of Italy, as amended from time to time, pursuant to which the Bank of Italy may request information on the offering or issue of securities in Italy or by Italian persons outside of Italy; and

(c) be made in compliance with any other applicable laws and regulations or requirement imposed by CONSOB, the Bank of Italy and/or any other competent authority.

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree that any offer, sale or delivery of the Notes or distribution of copies of this Base Prospectus or any other document relating to the Notes in the Republic of Italy will be made in accordance with all Italian securities, tax and exchange control and other applicable laws and regulations.

Japan

The Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948), as amended (the "FIEA"). Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer to sell any Notes in Japan or to, or for the benefit of, any resident of Japan (as defined under Item 5, Paragraph 1, Article 6 of the Foreign Exchange and Foreign Act (Act No. 228 0f 1949, as amended)), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident in Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan.

Jersey

This Base Prospectus does not constitute an offer to the public of Jersey to subscribe for the Notes offered hereunder. The Issuer does not have a relevant connection with Jersey. No regulatory approval has been sought for an offer in Jersey and it must be distinctly understood that the Jersey Financial Services Commission does not accept any responsibility for the financial soundness of, or any representations made in connection with, the Issuer. The offer of the Notes is personal to the person to whom the Notes are being delivered on behalf of the Issuer, and a subscription for Notes will only be offered from such person. The Notes may not be produced or used for any other purposes, nor be furnished to any other person other than those to whom they have been so delivered. Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, on terms to this effect.

The Netherlands

Zero Coupon Notes (as defined below) in definitive form of the Issuer may only be transferred and accepted, directly or indirectly, within, from or into the Netherlands through the mediation of either the Issuer or a member firm of Euronext Amsterdam N.V. in full compliance with the Dutch Savings Certificates Act (*Wet inzake spaarbewijzen*) of 21 May 1985 (as amended) and its implementing regulations. No such mediation is required: (a) in respect of the transfer and acceptance of rights representing an interest in a Zero Coupon Note in global form, or (b) in respect of the initial issue of Zero Coupon Notes in definitive form to the first holders thereof, or (c) in respect of the transfer and acceptance of Zero Coupon Notes in definitive form between individuals not acting in the conduct of a business or profession, or (d) in respect of the transfer and acceptance of such Zero Coupon Notes within, from or into the Netherlands if all Zero Coupon Notes (either in definitive form or as rights representing an interest in a Zero Coupon Note in global form) of any particular Series are issued outside the Netherlands and are not distributed into the Netherlands in the course of initial distribution or immediately thereafter.

As used herein "Zero Coupon Notes" are Notes that are in bearer form and that constitute a claim for a fixed sum against the Issuer and on which interest does not become due during their tenor or on which no interest is due whatsoever.

Norway

The Notes have not been registered with the Norwegian Central Securities Depositary (the "**VPS**"). Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold, and will not offer or sell, directly or indirectly, Notes denominated in Norwegian Kroner within Norway or in any other circumstance which would require the Notes to be registered with the VPS pursuant to Norwegian law and regulations. In addition, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will comply with all laws, regulations and guidelines applicable to the offering of Notes within Norway or to or for the account or benefit of persons domiciled in or citizens of Norway.

Grand Duchy of Luxembourg

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that it has not offered or sold, and will not offer or sell, directly or indirectly, the Notes to the public within the territory of the Grand-Duchy of Luxembourg ("**Luxembourg**") unless:

(a) a prospectus has been duly approved by the Commission de Surveillance du Secteur Financier (the "**CSSF**") pursuant to part II of the Luxembourg law of 16 July 2019, on prospectuses for securities, which applies the Prospectus Regulation (the "**Luxembourg Prospectus Law**") if Luxembourg is the home Member State as defined under the Prospectus Regulation; or

(b) if Luxembourg is not the home Member State as defined under the Prospectus Regulation, the CSSF and the European Securities and Markets Authority have been provided by the competent authority in the home Member State with a certificate of approval attesting that a prospectus in relation to the Notes has been duly approved in accordance with the Prospectus Regulation and with a copy of that prospectus; or

(c) the offer of Notes benefits from an exemption from, or constitutes a transaction not subject to, the requirement to publish a prospectus or similar document under the Luxembourg Prospectus Law.

Korea

The Notes have not been and will not be registered with the Financial Services Commission of Korea for public offering in Korea under the Financial Investment Services and Capital Markets Act (the "**FSCMA**"). Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes may not be offered, sold or delivered, directly or indirectly, or offered or sold for re-offering or resale, directly or indirectly, in Korea or to, or for the account of, any resident of Korea (as defined under the Foreign Exchange Transaction Act of Korea (the "**Foreign Exchange Transaction Law**"), except pursuant to the applicable laws and

regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law and the decrees and regulations thereunder.

People's Republic of China

Each of the Dealers has represented, warranted and undertaken, and each further Dealer appointed under the Programme will be required to represent, warrant and undertake, that the Notes may not be offered, sold or delivered, or offered or sold or delivered to any person for reoffering or resale or redelivery, in any such case directly or indirectly in the People's Republic of China (excluding Hong Kong, Macau and Taiwan, the "**PRC**") in contravention of any applicable laws.

This Base Prospectus does not constitute an offer to sell or the solicitation of an offer to buy any Notes in the PRC to any person to whom it is unlawful to make the offer or solicitation in the PRC.

Each of the Dealers do not represent that this Base Prospectus may be lawfully distributed, or that any Notes may be lawfully offered, in compliance with any applicable registration or other requirements in the PRC, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, it is not the Dealers intention and no action has been taken by the Dealers which would permit a public offering of any Notes or distribution of this document in the PRC. Accordingly, the Notes are not being offered or sold within the PRC by means of this Base Prospectus or any other document. Neither this Base Prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations.

Republic of China (Taiwan)

Unless the offer of the Notes has been and will be registered with the Financial Supervisory Commission or other regulatory authorities or agencies of Taiwan, the Republic of China pursuant to relevant securities laws and regulation, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes may not be sold, issued or offered within Taiwan, the Republic of China through a public offering or in circumstances which constitute an offer within the meaning of the Securities and Exchange Act of Taiwan, the Republic of China that requires a registration or approval of the Financial Supervisory Commission or other regulatory authorities or agencies of Taiwan, the Republic of China. No person or entity in Taiwan, the Republic of China has been authorised to offer, sell, give advice regarding or otherwise intermediate the offering and sale of any Notes in Taiwan, the Republic of China.

Singapore

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge, that no documents in connection with the offer of the Notes (including, without limitation, this Base Prospectus) have been registered with the Monetary Authority of Singapore. Accordingly, each Dealer has represented, warranted and undertaken, and each further Dealer appointed under the Programme will be required to represent, warrant and undertake, to the Issuer and the Guarantors that it has not offered or sold any Notes or caused such Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause such Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Base Prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A(1)(c) of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the "**SFA**"), pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulation 2018, or (iii) pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A(1)(a) of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

the securities or securities-based derivatives contracts (each term as defined in Section 2 (1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

(a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA and in accordance with the conditions specified in Section 275 of the SFA;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law;

(d) as specified in Section 276(7) of the SFA; or

(e) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Spain

Neither the Notes nor this Base Prospectus have been or will be registered with the Spanish Securities Market Commission (*Comisión Nacional del Mercado de Valores*). The Notes may not be offered, sold or distributed, nor may any subsequent resale of Notes be carried out in Spain, except in compliance with the provisions of the Prospectus Regulation and the consolidated text of the Spanish Securities Market Law approved by Royal Legislative Decree 4/2015 of 23 October (*Real Decreto Legislativo 4/2015, de 23 de octubre, por el que se aprueba el texto refundido de la Ley del Mercado de Valores*), as amended, and further developing legislation. No publicity or marketing of any kind shall be made in Spain in relation to the Notes.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree that it has not and will not direct or make any offer of the Notes to investors located in Spain.

Switzerland

Each Dealer has undertaken and agreed, and each further Dealer appointed under the Programme will be required to undertake and agree, that this Base Prospectus is not intended to constitute an offer or solicitation to purchase or invest in the Notes and the Notes may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act ("**FinSA**") and no application has or will be made to admit the Notes to trading on any trading venue (exchange or multilateral trading facility) in Switzerland. Neither this Base Prospectus nor any other offering or marketing material relating to the Notes constitutes a prospectus pursuant to the FinSA, and neither this Base Prospectus nor any other offering or marketing material relating to the notes may be publicly distributed or otherwise made publicly available in Switzerland.

United Arab Emirates (excluding the Dubai International Financial Centre)

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes have not been and will not be offered, sold or publicly promoted or advertised by it in the UAE other than in compliance with any laws applicable in the UAE governing the issue, offering and sale of securities.

Dubai International Financial Centre

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered and will not offer the Notes to any person in the Dubai International Financial Centre unless such offer is:

(a) an "**Exempt Offer**" in accordance with the Markets Rules (MKT) Module of the Dubai Financial Services Authority (the "**DFSA**") Rulebook; and

(b) made only to persons who meet the "**Professional Client**" criteria set out in Rule 2.3.3 of the DFSA Conduct of Business Module of the DFSA Rulebook.

General

Each Dealer has represented, warranted and agreed that it has complied and will comply with all applicable laws and regulations in each country or jurisdiction in or from which it purchases, offers, sells or delivers Notes or possesses, distributes or publishes this Base Prospectus, any Final Terms, any Drawdown Prospectus or any related offering material, in all cases at its own expense. Other persons into whose hands this Base Prospectus, any Final Terms or any Drawdown Prospectus comes are required by the Issuer, the Guarantors and the Dealers to comply with all applicable laws and regulations in each country or jurisdiction in or from which they purchase, offer, sell or deliver Notes or possess, distribute or publish this Base Prospectus, any Final Terms, any Drawdown Prospectus or any related offering material, in all cases at their own expense.

The Dealer Agreement provides that the Dealers shall not be bound by any of the restrictions relating to any specific jurisdiction (set out above) to the extent that such restrictions shall, as a result of change(s) or change(s) in official interpretation, after the date hereof, of applicable laws and regulations, no longer be applicable but without prejudice to the obligations of the Dealers described in the paragraph headed "*General*" above.

Selling restrictions may be supplemented or modified with the agreement of the Issuer.

KEY PERFORMANCE INDICATORS

The Group uses certain financial measures derived from its consolidated financial statements, accounting records and other management sources to evaluate period to period changes that are not required or presented in accordance with IFRS because the Group believes these measures will assist securities analysts, investors and other interested parties in the understanding of the Group's results of operations and financial position.

These supplemental financial measures derived from the Group's consolidated financial statements, accounting records and other management sources are not measures of the Group's financial performance or liquidity under IFRS and should not be considered as an alternative to consolidated net income as an indicator of the Group's performance or as an alternative to cash flows from operating activities or as a measure of the Group's liquidity. Accordingly, they may differ from similarly-titled measures reported by other companies and may not be comparable. Investors are cautioned not to place undue reliance on these alternative performance measures, which should be considered supplemental to, and not a substitute for, the financial measures presented in the consolidated financial statements prepared in accordance with IFRS and incorporated by reference in this Base Prospectus. These supplemental financial measures include EBITDA, adjusted debt to Group equity ratio, corporate debt to EBITDA ratio, operating free cash flow and industrial assets.

This section only contains the alternative performance measures used in the Base Prospectus. This overview is not complete given that the Group also uses IFRS performance measures. For these measures, reference is made to the Group Financial Statements and the Group Interim Financial Statements, incorporated by reference into this Base Prospectus.

EBITDA

From an operating profit perspective, Trafigura believes that EBITDA (Earnings before interest, taxes, Depreciation and Amortisation) is the most appropriate measure to assess its operating performance. EBITDA as presented in the Base Prospectus may not be comparable to similarly title measures reported by other companies due to differences in the way these measures are calculated.

The following table sets out a reconciliation of the Group's results from operating activities to EBITDA for the financial years ended 30 September 2014 to 2019, and for the six months ended 31 March 2019 and 2020.

	Financial year ended 30 September						6 months ended 31 March	
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2019**	**2020**
				USD million				
Results from operating activities	**1,525**	**1,407**	**1,111**	**1,457**	**1,492**	**1,649**	**894**	**1,275**
Adjusted for:								
Depreciation and amortisation	236	220	205	199	192	201	78	645
Share-based payment expenses	42	51	78	82	88	108	70	92
Exceptional items in staff costs	-	-	-	18	(12)	(2)	-	-
Other income/(expense)	(484)	198	233	(163)	(45)	172	68	398
Sub-total	**1,319**	**1,876**	**1,627**	**1,593**	**1,714**	**2,128**	**1,110**	**2,410**
Add back: non-exceptional items in other income/(expense)	(10)	(15)	1	(13)	(2)	1	2	1
EBITDA	**1,309**	**1,861**	**1,628**	**1,580**	**1,712**	**2,129**	**1,112**	**2,411**

Adjusted debt to Group equity ratio

As a physical trading group, Trafigura relies on a specific funding model. As a result, one cannot apply the same financial analysis framework as for other, more typical industrial companies.

The adjusted debt metric represents Trafigura's total long- and short-term debt less cash, deposits, readily marketable inventories, debt related to the Group's securitisation programmes and the non-recourse portion of loans. This metric is a better measure of the Group's financial leverage than a simple gross debt metric. In particular, the following adjustments are made:

- The Trade Receivables Securitisation Programme has been taken out on the basis it is raised by an entirely distinct legal entity from Trafigura with no recourse to the Group and is only consolidated into the financial statements in accordance with the Group's accounting rules.
- Cash and short-term deposits are deducted from debt.
- Pre-sold or hedged stock, including purchased and pre-paid inventories which are being released, is deducted from debt. This reflects the great liquidity of the stock and the ease at which this could be converted to cash. As previously described, Trafigura's policy is to have 100 per cent. of stock hedged or pre-sold at all times.
- Non-recourse invoice discountings or portion of loans (for example non-recourse portions of bank financings used to extend prepayments to counterparties) are deducted from debt.

A reconciliation of the Group's current and non-current loans and borrowings to adjusted debt to Group equity ratio as of 30 September 2018 and 2019 and as of 31 March 2020 is presented on page 11 of the Trafigura Annual Report for the financial year ended 30 September 2019 and page 31 of the Trafigura Interim Report for the period ended 31 March 2020, respectively, each incorporated by reference in this Base Prospectus (see "*Information Incorporated by Reference*").

Corporate debt to EBITDA ratio

Over time, Trafigura has reviewed the adequacy of the adjusted debt concept and introduced a leverage ratio referred to as the corporate debt to EBITDA ratio in 2015. Trafigura believes this is a more relevant ratio for senior unsecured creditors than the adjusted debt to Group equity ratio.

In particular, the adjusted debt to Group equity ratio does not take into account the excess of trade receivables over trade payables, which would be available to senior creditors in the case of a liquidation. Commodity receivables typically have a short duration (of 1 to 3 months) and very low default rate due to the strategic nature of the goods. By removing the trade receivables in excess of trade payables, the corporate debt excludes any working-capital debts which are repaid through resale of the commodity (self-liquidating debts), and rather focuses on debt which is repaid by EBITDA generation.

The corporate debt considers all debts, whether short-term or long-term, and removes:

- Cash and short-term deposits;
- Pre-sold or hedged stock (including purchased and pre-paid inventories being released);
- Trade receivables (including the MATSA sale receivable) in excess of trade payables and derivatives; and
- Any corporate debt for which lenders do not have recourse to Trafigura (e.g. non-recourse portion of bank financings used to extend prepayments to counterparties).

The Trade Receivables Securitisation Programme does not need to be deducted separately since the excess of trade receivables over trade payables would capture it. Likewise, non-recourse debt relating to invoice discounting is not considered, avoiding double counting (as receivables in excess of payables are already deducted).

The following table sets out a reconciliation of the Group's current and non-current loans and borrowings to corporate debt to EBITDA ratio as at 30 September 2018 and 2019, and 31 March 2020 using EBTIDA for the last twelve months ending on the respective date.

	As at 30 September		As at 31 March
	2018	2019	2020
	USD million		
Non-current loans and borrowings	8,462	8,492	8,719
Current loans and borrowings	23,742	22,456	22,124
Total debt	**32,204**	**30,948**	**30,843**
Adjusted for:			
Cash and cash equivalents	(5,356)	(6,267)	(6,717)
Deposits	(334)	(374)	(384)
Pre-sold/hedged inventories	(15,621)	(14,137)	(12,496)
Trade receivables in excess of trade payables (incl. current derivatives)	(5,863)	(4,798)	(6,682)
Non-recourse debt	(202)	(87)	(281)
Corporate debt	**4,828**	**5,284**	**4,283**
EBITDA over the last 12 months*	1,712	2,129	2,943
Corporate debt/EBITDA over the last 12 months	**2.8x**	**2.5x**	**1.5x**

(*) EBITDA for H1 2020 excludes the impact of IFRS 16 amounting to +USD 485m

Industrial Assets

Trafigura presents the industrial assets which are calculated as total non-current assets, minus non-current prepayments, non-current derivatives and deferred tax assets.

The following table sets out a reconciliation of the Group's total non-current assets to industrial assets as at 30 September 2018 and 2019, and as at 31 March 2020.

	As at 30 September		As at 31 March
	2018	2019	2020
	USD million		
Total non-current assets	**8,836**	**10,777**	**12,528**
Adjusted for:			
Non-current prepayments	(596)	(679)	(768)
Non-current derivatives	(339)	(393)	(581)
Deferred tax assets	(171)	(277)	(208)
Right to use assets			(2,545)
Lease receivables			(143)
Other non-current assets	(1,095)	(348)	(252)
Total Industrial Assets	**6,636**	**9,080**	**8,031**

Operating Free Cash Flow

Trafigura's funding model is structurally designed to absorb significant working capital requirements, as demonstrated over time. Therefore, Trafigura's underlying financial performance and leverage position is better assessed on the basis of operating free cash flow ("**Operating Free Cash Flow**") generation, which is defined as operating cashflow before working capital changes, minus net interest paid, dividends received, tax paid and net cash used in investing activities.

To understand Trafigura's underlying cash flow generation, one should focus on Operating Free Cash Flow generation. Movements in underlying commodity prices, alongside changes in volume, can cause significant swings in cash flow generated by changes in working capital. These drivers have little impact on underlying performance, given price risk is systematically hedged. Short-term financing is used to finance outflows where required and these items therefore largely net off from a cash flow perspective.

Following a phase of strategic investment in industrial assets, peaking in 2013, Trafigura has generated USD 3.8 billion of Operating Free Cash Flow over the last four fiscal years. This reflects Trafigura's consistent cash flow generation in conjunction with an updated investment approach, i.e. reduction in annual Capex spend, often including partners when directly making new investments and disposal of non-core assets. It is also worth noting that Operating FCF has also more than covered the Company's share buybacks over the last four years, which further demonstrates Trafigura's commitment to a conservative capital structure.

The following table sets out a reconciliation of the Group's Operating Free Cash Flow generated in fiscal years 2017, 2018 and 2019, and the first half of fiscal year 2019 and 2020.

	Financial year ended 30 September			6 months ended 31 March	
	2017	2018	2019	2019	2020
		USD million			
Operating cash flow before working capital changes	**1,650**	**1,655**	**1,993**	**1,079**	**2,345**
Adjusted for:					
Interest paid	(820)	(1,194)	(1,397)	(732)	(660)
Interest received	524	620	705	403	216
Dividends (paid)/received	36	50	0	0	1
Tax (paid)/received	(181)	(116)	(183)	(107)	(97)
Net cash used in investing activities	(412)	(95)	(285)	(5)	(171)
Total Operating Free Cash Flow*	**797**	**921**	**832**	**638**	**1,634**

** Operating Free Cash Flow for H1 2020 includes the +USD 439m impact of IFRS 16*

GENERAL INFORMATION

Authorisation

1. The 2020 updating of the Programme was authorised by written resolution of the board of directors of the Issuer passed on 1 September 2020. The 2020 updating of the Programme was duly authorised by the respective directors of TGPL and TPTE under the resolutions of their respective boards of directors dated 1 September 2020 (in the case of TGPL) and 1 September 2020 (in the case of TPTE), and by the managing member of TTL under the written consent of the managing member dated 1 September 2020. Each of the Issuer and the Guarantors has obtained or will obtain from time to time all necessary consents, approvals and authorisations in connection with the issue and performance of the Notes and the giving of the guarantee relating to them.

Listing Agent

2. Walkers Listing Services Limited is acting solely in its capacity as listing agent for the Issuer in relation to the Notes and is not itself seeking admission of the Notes to the Official List or to trading on the regulated market of Euronext Dublin.

Legal and Arbitration Proceedings

3. There are no governmental, legal or arbitration proceedings, (including any such proceedings which are pending or threatened, of which the Issuer or the Guarantors are aware), which may have, or have had during the 12 months prior to the date of this Base Prospectus, a significant effect on the financial position or profitability of the Issuer or the Guarantors or their subsidiaries.

Material Change in Prospects

4. Since 30 September 2019, there has been no material adverse change in the prospects of the Issuer, the Guarantors or any of their subsidiaries.

Significant Change in Financial or Trading Position

5. Since 31 March 2020 (the date of the Group's last published unaudited consolidated interim financial statements) there has been no significant change in the financial performance or financial position of the Issuer, the Guarantors or any of their subsidiaries.

Auditors

6. The consolidated financial statements of the Group have been audited without qualification for the years ended 30 September 2018 and 30 September 2019 by PricewaterhouseCoopers SA, avenue Giuseppe-Motta 50, CH-1211 Geneva 2, Switzerland, independent auditors, as stated in the respective auditors' reports, incorporated by reference in this Base Prospectus.

7. The financial statements of the Issuer have been audited without qualification for the years ended 30 September 2018 and 30 September 2019 by PricewaterhouseCoopers, Société coopérative, 2, rue Gerhard Mercator, L-1014 Luxembourg, Grand Duchy of Luxembourg, independent auditors, as stated in the respective auditors' reports, incorporated by reference in this Base Prospectus.

8. For the financial years ended 30 September 2018 and 30 September 2019, the auditor of TTL was PricewaterhouseCoopers SA, Geneva Branch whose registered office is at avenue Giuseppe-Motta 50, 1211 Geneva, Switzerland.

9. For the financial years ended 30 September 2018 and 30 September 2019, the auditor of TPTE was PricewaterhouseCoopers LLP, who registered office is at 7 Straits View, Marina One, East Tower, Level 12, Singapore 018936.

Documents on Display

10. Electronic copies of the following documents (together, if necessary, with English translations thereof) will, when published, be available for inspection from https://www.trafigura.com/financials/ for 12 months from the date of this Base Prospectus:

(a) the Group Financial Statements;

(b) the Group Interim Financial Statements;

(c) the Paying Agency Agreement;

(d) the Trust Deed;

(e) a copy of this Base Prospectus; and

(f) any supplements to this Base Prospectus and Final Terms to this Base Prospectus.

11. Electronic copies of the following documents (together, if necessary, with English translations thereof) will, when published, be available for inspection from the website of Euronext Dublin (*http://www.ise.ie*) for 12 months from the date of this Base Prospectus:

(a) the constitutive documents of the Issuer;

(b) the constitutive documents of the Guarantors; and

(c) the Issuer Financial Statements.

Clearing of the Notes

12. The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg. The appropriate common code, International Securities Identification Number (ISIN), Financial Instrument Short Name (FISN) and Classification of Financial Instruments (CFI) code (as applicable) in relation to the Notes of each Tranche will be specified in the relevant Final Terms. The relevant Final Terms shall specify any other clearing system as shall have accepted the relevant Notes for clearance together with any further appropriate information.

Notes Having a Maturity of Less Than One Year

13. Where Notes have a maturity of less than one year and either (a) the issue proceeds are received by the Issuer in the United Kingdom or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, such Notes must: (i) have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued only to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses; or (ii) be issued in other circumstances which do not constitute a contravention of section 19 of the FSMA by the Issuer.

Issue Price and Yield

14. Notes may be issued at any price. The issue price of each Tranche of Notes to be issued under the Programme will be determined by the Issuer, the Guarantors and the relevant Dealer(s) at the time of issue in accordance with prevailing market conditions and the issue price of the relevant Notes or the method of determining the price and the process for its disclosure will be set out in the applicable Final Terms. In the case of different Tranches of a Series of Notes, the issue price may include accrued interest in respect of the period from the interest commencement date of the relevant Tranche (which may be the issue date of the first Tranche of the Series or, if interest payment dates have already passed, the most recent interest payment date in respect of the Series) to the issue date of the relevant Tranche.

The yield of each Tranche of Notes set out in the applicable Final Terms will be calculated as of the relevant issue date on an annual or semi-annual basis using the relevant issue price. It is not an indication of future yield.

The Legal Entity Identifiers

15. The Legal Entity Identifier (LEI) code of the Issuer is 549300IDCRNFW0C0TJ66.

16. The Legal Entity Identifier (LEI) code of Trafigura Group Pte. Ltd. is 549300HJ8VS88NIO3006.

17. The Legal Entity Identifier (LEI) code of Trafigura Trading LLC is 5493007VXQNREL92V435.

18. The Legal Entity Identifier (LEI) code of Trafigura Pte Ltd is 549300Z2X1L1L3MID765.

INDEX OF DEFINED TERMS

REGISTERED OFFICE OF THE ISSUER

Trafigura Funding S.A.
21 rue du Puits Romain
L-8070 Betrange
Grand Duchy of Luxembourg

REGISTERED OFFICES OF THE GUARANTORS

Trafigura Group Pte. Ltd.
10 Collyer Quay
#29-00 Ocean Financial Centre
Singapore 049315
Singapore

Trafigura Trading LLC
1209 Orange Street
Wilmington New Castle County
Delaware 19801
United States

Trafigura Pte Ltd
10 Collyer Quay
#29-00 Ocean Financial Centre
Singapore 049315
Singapore

ARRANGER

ING Bank N.V.
Foppingadreef 7
1102 BD Amsterdam
The Netherlands

DEALERS

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Citigroup Centre
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Canary Wharf
London E14 5LB
United Kingdom

Citigroup Global Markets Europe AG
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Germany

Credit Suisse Securities (Europe) Limited
One Cabot Square
London E14 4QJ
United Kingdom

Deutsche Bank Aktiengesellschaft
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Germany

ING Bank N.V.
Foppingadreef 7
1102 BD Amsterdam
The Netherlands

Société Générale
29, boulevard Haussmann
75009 Paris
France

PRINCIPAL PAYING AGENT

Citibank N.A., London Branch
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB
United Kingdom

TRUSTEE

Citicorp Trustee Company Limited
Citigroup Centre
Canada Square
Canary Wharf
London E14 5LB
United Kingdom

LEGAL ADVISERS

To the Issuer and the Guarantors as to English and Delaware law:

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Citypoint, 16th Floor
One Ropemaket Street
London, EC2Y 9AW
United Kingdom

To the Dealers and the Trustees as to English law:

Clifford Chance LLP
10 Upper Bank Street London E14 5JJ United Kingdom

To the Issuer and Guarantors as to Singapore law

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16 Collyer Quay, Singapore 049318

To the Issuer and the Guarantors as to Luxembourg law:

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69, Boulevard de la Pétrusse
L-2320 Luxembourg

AUDITORS TO THE COMPANY

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CH-1211 Geneva 2
Switzerland

LISTING AGENT

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5th Floor, The Exchange,
George's Dock,
Dublin 1, D01 W3P9
Ireland

EXHIBIT B

TRAFIGURA

2020 ANNUAL REPORT

TRAFIGURA GROUP PTE. LTD.

ADVANCING TRADE

Financial and business highlights[1]

Group revenue

$147.0bn

2020	147.0
2019	171.5
2018	180.7

Combined volume of commodities traded[2]

365.3mmt

2020	365.3
2019	372.1
2018	371.1

Gross profit

$6.8bn

2020	6.8
2019	2.9
2018	2.4

Total assets

$57.0bn

2020	57.0
2019	54.2
2018	53.8

Oil and Petroleum Products revenue as a percentage of Group revenue

57%

2020	57
2019	65
2018	69

Oil and Petroleum Products total volume traded

267.7mmt

2020	267.7
2019	274.9
2018	275.2

Gross profit margin

4.6%

2020	4.6
2019	1.7
2018	1.3

Total non-current assets

$11.1bn

2020	11.1
2019	10.8
2018	8.8

Metals and Minerals revenue as a percentage of Group revenue

43%

2020	43
2019	35
2018	31

Non-ferrous concentrates and refined metals total volume traded

20.9mmt

2020	20.9
2019	19.9
2018	18.5

Net profit

$1.6bn

2020	1.6
2019	0.9
2018	0.9

Total Group equity

$7.8bn

2020	7.8
2019	6.8
2018	6.3

Bulk minerals total volume traded

76.7mmt

2020	76.7
2019	77.3
2018	77.4

EBITDA[3]

$6.0bn

2020	6.0
2019	2.1
2018	1.7

Average number of employees over the year[4]

8,619

2020	8,619
2019	5,106
2018	4,316

1. Trafigura's financial year ran from 1 October 2019 to 30 September 2020. Figures for this period include the new IFRS 16 reporting requirements.
2. Million metric tonnes.
3. EBITDA (earnings before interest, tax, depreciation and amortisation) is operating profit excluding the share in results of equity-accounted investees, depreciation and amortisation, gains/losses on divestments of subsidiaries, equity-accounted investees and other investments, impairment losses and other non-operating income and expenses.
4. Total employee numbers are calculated as an average over the financial year and comprise employees of consolidated Trafigura Group businesses, operations and offices. For the first time in FY2020, this includes 3,921 Nyrstar employees, following the consolidation of Nyrstar into the Trafigura Group in July 2019. MATSA, Puma Energy, Porto Sudeste and [Impala] Simba employees are excluded as these assets are not consolidated in the Trafigura Group financial accounts.

ADVANCING TRADE

Global trade brings the world closer together.

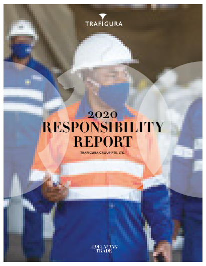
It expands the wealth of nations, forges common interests and builds mutual trust.

Trafigura makes trade happen. And we make it our mission to do that responsibly. We deploy infrastructure, skills and our global network to move physical commodities from places they are plentiful to where they are most needed.

We have been connecting our customers to the global economy for over a quarter of a century. We grow prosperity by advancing trade.

Find out more
www.trafigura.com

Contents



The 2020 Annual Report is complemented by our 2020 Responsibility Report. The Responsibility Report reflects on Trafigura's progress in implementing responsible business practices and presents our performance in managing our social and environmental impacts.

For further information visit: www.trafigura.com/responsibility

At a glance

Trafigura's core business is the physical trading of oil and petroleum products and metals and minerals, and their transportation across the globe. Our assets and investments complement and enhance these activities. We have 8,619 employees across 48 countries.

Trading and logistics[1]

Oil and Petroleum Products

267.7 mmt

(Total volume traded)

Trafigura is one of the world's largest traders by volume of oil and petroleum products, with a global presence and comprehensive coverage of all major markets.

Metals and Minerals

97.6 mmt

(Total volume traded)

As a leading metals and minerals trader, we negotiate offtake and supply agreements with miners and smelters globally.

Shipping and Chartering

4,225 fixtures

(Shipping and Chartering fixtures)

Our Shipping and Chartering desk is closely integrated into Trafigura's business model, providing freight services to commodity trading teams internally and trading freight externally in the professional market.

Industrial and financial assets

impala

Impala Terminals is a multimodal logistics provider focused on export-driven emerging markets. It owns and operates ports, port terminals, warehouses and transport assets.

TRAFIGURA MINING GROUP

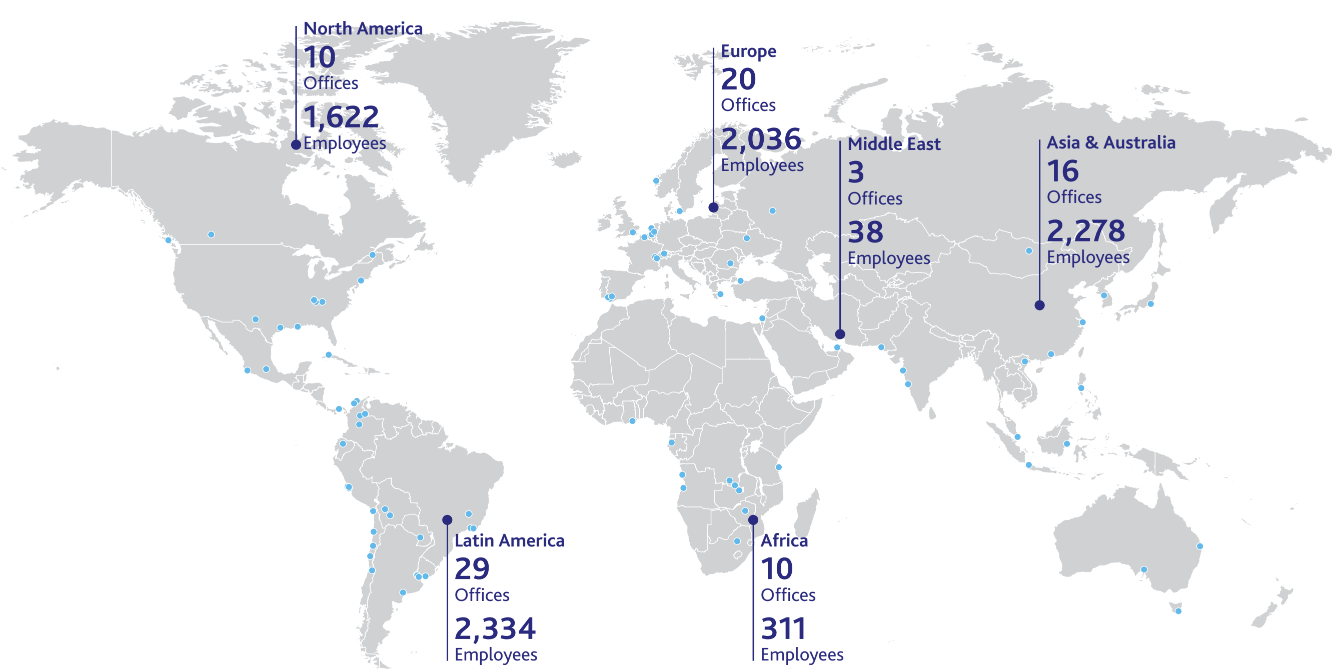
Trafigura Mining Group manages mining operations, develops projects and conducts technical audits of existing and potential partner projects.

GALENA asset management

Galena Asset Management provides investors with specialised alternative investment solutions through its investments in real assets and private equity funds.

nyrstar

Nyrstar is a global multi-metals mining and smelting business, with a market-leading position in zinc and lead.



1. Figures as at 30 September 2020

www.trafigura.com/locations

What we do

We connect counterparties, build capacity and develop physical commodity markets reliably, efficiently and responsibly. We are adding value to the global trade in natural resources with exceptional service and performance across the supply chain.

Value creation

Processors

Natural resources

- Non-renewable
- Renewable

Source
We negotiate offtake agreements with oil producers, refiners, mining companies and smelters. We own mines and smelters and invest in logistics that improve market access for our suppliers.
We invest in renewable power generation, storage capacity and alternative technologies.

Store
We store petroleum products at owned and third-party tankage. We store metals and minerals at Impala Terminals and third-party-owned facilities.

Blend
We blend physical commodities to regional, market and customer specifications in strategically located terminals and warehouses around the world.

Deliver
We operate efficient, safe and high-quality logistics.
We move commodities by barge, truck, rail, pipeline and vessel in support of our core trading activities and for third parties.
We supply renewable power to electricity grids and our own operational facilities.

Transformed commodities

Power

By transforming commodities

- In space
- In time
- In form

By reducing costs

- Global network
- Market knowledge
- Low financing cost
- Operational efficiency
- Economies of scale
- Infrastructure investment
- Supply chain optimisation

By managing risks

- Hedged financial risks
- Political and liability risk insurance
- Integrated systems and processes
- Regulatory compliance
- Governance and responsibility

By limiting emissions

- Transition-enabling metals
- Reduced carbon intensity
- Reduced carbon footprint
- Solar, wind and storage infrastructure
- Alternative technologies
- Renewable energy supply
- Developing low-carbon markets

Statement from the Executive Chairman and Chief Executive Officer

A strong result in a volatile year

In an extraordinary period for global commodity markets, Trafigura Group delivered exceptional customer service and a strong overall commercial and financial performance.

Jeremy Weir
Executive Chairman and Chief Executive Officer

I am pleased to present Trafigura Group's 2020 Annual Report, covering our performance and progress in what by any standard was a challenging and volatile year for the global economy and for commodity markets, as a result of the COVID-19 pandemic.

It was a year in which commodity supply chains were significantly disrupted, not only by the virus and by government measures to curb it, but also by changing trade policies and geopolitics. Amidst unprecedented market conditions, our expertise in physical commodity trading, risk management and logistics was called upon to an exceptional degree.

I am proud to say that our people around the world rose to the challenge, working professionally with resourcefulness, discipline and in difficult circumstances to address our customers' supply issues, deliver reliable service and maintain operational performance. I am also pleased to report that our Foundation, employees and businesses supported a range of community and charitable initiatives to help those most affected by the pandemic. I would like to thank every individual who contributed to these collaborative efforts, from our commercial staff to our support and operational employees.

Our financial result, including a net profit for the year of USD1,599 million, reflects an excellent performance from our core trading divisions, Oil and Petroleum Products, and Metals and Minerals, both of which delivered record gross profit and EBITDA.

At the same time, our industrial assets were adversely impacted by COVID-19 and the consequent economic downturn. Despite further improvements in our health, safety and environmental performance this year, I am saddened to report the death of an Impala Terminals employee in Colombia, and two further fatalities at our MATSA mining joint venture in Spain. These incidents underline the work still needed to achieve the excellence in health and safety to which we aspire.

Changing market dynamics

Trafigura Group's core strategy is to advance trade efficiently and responsibly, using its global scale, cross-commodity reach and in-depth market knowledge to connect producers and consumers of energy and industrial raw materials around the world. Our success this year was a reflection of this core strategy, as well as the investments we have made over several years in recruiting and developing talent and in establishing world-class trading infrastructure, IT and risk control systems.

The teamwork across our global office network ensured that we were quick to understand the rapidly changing and highly variable market dynamics across the commodity spectrum as the virus spread, and to deploy work from home procedures rapidly and smoothly. Our platform could react to price signals by shifting large volumes of commodities between geographical regions to where they were needed most or into storage when supply outstripped demand – the fundamental function of physical commodities traders in volatile conditions.

We were on hand to provide support to our counterparties, helping minimise the impact of COVID-19 and volatile market conditions on their operations. This strong focus on customer service and flexibility further strengthened our long-term relationships.

Margins were boosted by understanding the rapidly changing market environment and by commercialising arbitrage opportunities, resulting in a gross trading margin for the Group of 4.6 percent, a significant step-up when compared to 1.7 percent in FY2019 and 1.3 percent the year before. Consolidation was evident across the trade commodity sector, as competitors refocused business models and smaller players suffered from a reduction in credit availability.

Our metals volumes grew in both relative and absolute terms. In oil, monthly volumes reflected the volatile market conditions and, despite peak volumes in April, were broadly flat overall compared to the previous year, while our global bunker fuel footprint expanded with the successful start of our fast-growing joint venture, TFG Marine.

Financial discipline

Our commercial performance was robust, however, we were not immune to the economic downturn. Our industrial assets in all regions suffered from the contraction in demand and restrictions in the movement of goods and people caused by the pandemic.

The Group took a conservative approach to assessing the value of its fixed assets and maintained a disciplined approach to investment. The fuel distribution and retailing business, Puma Energy, made a loss during the year and its equity value was adjusted downwards on our balance sheet. The Nyrstar zinc and lead smelting business, of which Trafigura took control in 2019, is in the midst of a turnaround, but made a loss. The value of the Colombian port and logistics venture operated by our Impala Terminals subsidiary was also impaired.

This financial year, I am pleased to say that our total capital expenditure – principally focused on maintaining and upgrading Nyrstar's smelting assets after years of under investment – was largely offset by realisations from asset disposals via our profitable sale of equity stakes in shipowners Scorpio Tankers and Frontline.

Transparency and governance

We believe that transparency, responsibility and good governance are vital in building trust, in securing long-term relationships with our stakeholders and in developing and growing our business. Our efforts over recent years to drive greater transparency within the commodities trading sector have contributed to improved international reporting standards, such as those developed by the Extractive Industries Transparency Initiative (EITI), including new sector transparency guidelines launched in 2020. As a Board Member of EITI, Trafigura is committed to uphold industry-leading standards in reporting transparently, engaging constructively and encouraging greater participation.

Similarly, we are progressing various initiatives to improve the transparency of global supply chains and to ensure responsible sourcing, in particular of the metals and minerals we supply, in line with increasing demands from customers, consumers, financiers and regulators. Our Responsible Sourcing programme has been embedded into the business over the past several years. Through it, we aim to identify key risks, engage suppliers, customers and financiers in risk mitigation efforts and provide assurance to key stakeholders that the ores and concentrates we supply are produced in accordance with global standards, including applicable OECD guidelines.

Managing compliance remains a priority. Following the significant steps taken in 2019, including eliminating the practice of using intermediaries for business origination and development across our global operations, we continued to extend and rigorously enforce our robust compliance programme in 2020. This has resulted in systemised processes and significantly strengthened controls related to vessel screening, counterparty due diligence, and the closer oversight of higher-risk third party service providers.

Positioned for a changing world

The world that emerges from the COVID-19 pandemic will differ in important aspects. Efforts to reduce carbon emissions in order to address the problem of climate change, already gathering pace before the pandemic, will accelerate further. Renewable energy will supply an ever-increasing share of the world's power supply, and electric and hydrogen-fuelled vehicles will account for an expanding proportion of the global automobile fleet. New technologies and new environmental regulations will likely result in market disruptions, but also provide business opportunities.

At the end of 2020, Trafigura is in an excellent position to navigate and benefit from these trends. As a leading trader in non-ferrous metals, we have significant and growing exposure to a sector where demand – for copper, cobalt, aluminium, nickel and other products – is set to expand substantially as a result of electrification and renewable energy technologies.

As a leading trader in oil and gas, and metals and minerals, we are playing our part in the energy transition. Whilst oil will remain important and required for many years and we will continue to build market share, we are providing cleaner fuels and alternative energy sources and investing in new technologies such as storage systems and hydrogen.

This year, we set out to enhance these activities by establishing a third trading division focused on power and renewables. We believe that an electricity market that is growing and experiencing significant disruption offers opportunity to apply our commercial and risk-control skills, and I fully expect this new division to take its place alongside energy and metals as a core Trafigura business over the next few years.

As a major charterer and supplier of shipping and as an operator of industrial assets, we are also conscious of the need to reduce the carbon emissions for which we are responsible. This year, we have set ambitious but realistic targets to curb greenhouse gas emissions from our own operations in the next three years. We are also setting out a path to reduce emissions indirectly attributable to our activities over time. The details of these targets and our other environmental, social and governance ambitions, initiatives and performance will be published in our 2020 Responsibility Report.

For Trafigura Group, this was a year that proved and improved the strength of our business. We emerge from it with a stronger balance sheet, an improving asset portfolio and an enhanced and increasingly diversified trading platform that we believe is well placed to adapt to and to assist the accelerated global transition to a lower-carbon world.

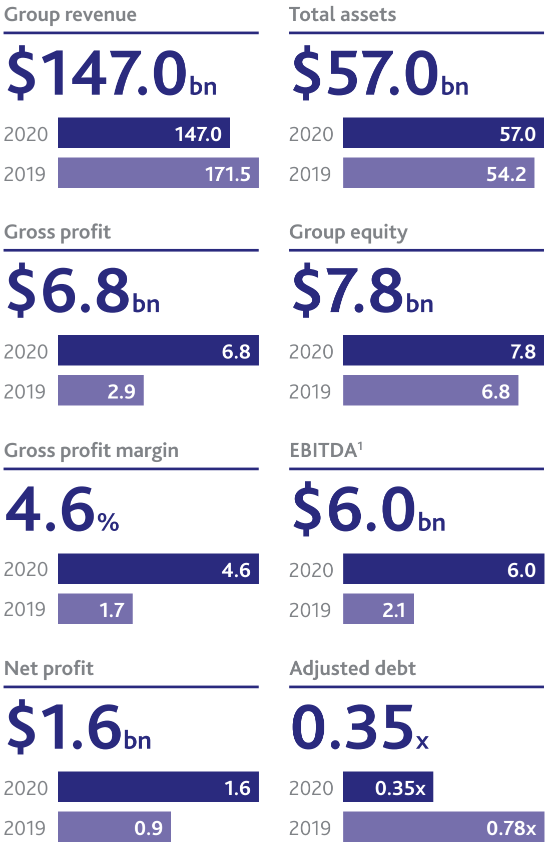
These are all reasons to be excited about the prospects for Trafigura Group, not merely to prosper from renewed growth in the global economy following the travails of 2020, but also to play a key role in building a better future.

Financial review

Remarkable trading performance drives record profit

Strong margins and cash-flow generation enabled Trafigura to significantly strengthen its balance sheet, leading to a material reduction of its leverage metrics in the 2020 financial year.

Christophe Salmon
Group Chief Financial Officer



[1] EBITDA (earnings before interest, tax, depreciation and amortisation) is operating profit excluding the share in results of equity-accounted investees, depreciation and amortisation, gains/losses on divestments of subsidiaries, equity-accounted investees and other investments, impairment losses and other non-operating income and expenses.

The 2020 financial year saw the best business performance in Trafigura Group's 27 year history. The company generated record gross profit, EBITDA and cash flow, while profit for the year, at USD1,599 million, was surpassed only by the result in 2013, which included various exceptional, non-cash items.

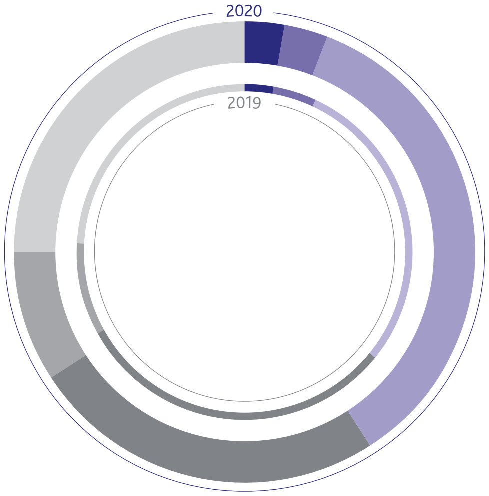
Profit for the year was 84 percent higher than the figure of USD868 million achieved in FY2019. Gross profit, at USD6,795 million, was approximately 2.4 times the FY2019 level (2.0 times on a like-for-like basis). EBITDA at USD6,064 million was 2.8 times last year's total of USD2,129 million (2.3 times on a like-for-like basis). Our overall trading margin was 4.6 percent, likewise a significant multiple of the margins achieved in recent years and nearly three times the level in FY2019.

These figures reflect an outstanding performance by both core trading divisions, Oil and Petroleum Products and Metals and Minerals, in the volatile markets, which were mainly created by the COVID-19 pandemic. The strong profit for the year came despite losses and substantial value impairments in relation to some of our industrial assets as a result of the economic downturn caused by the virus.

Strong earnings and cash flows enabled us to significantly strengthen our balance sheet during the year, with total Group equity rising 14 percent to a record USD7,790 million as at 30 September 2020, from USD6,805 million a year earlier. The valuation of our fixed assets led to significant impairments, which has contributed to improving the solidity and resilience of our balance sheet.

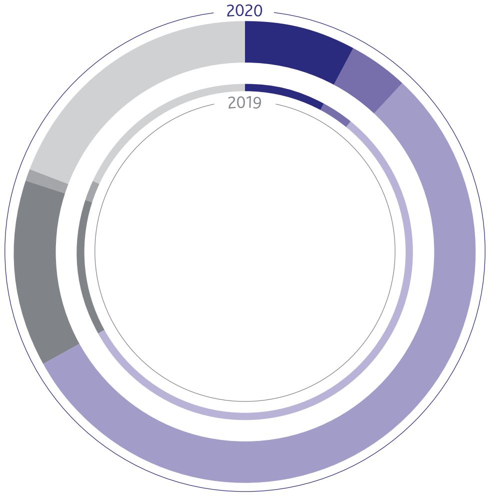
Our financial leverage was sharply reduced, with the ratio of adjusted debt to net equity falling to 0.35x from 0.78x a year earlier, substantially below our medium-term target of 1x. All this was achieved despite a five percent increase in total assets to USD57 billion, mainly driven by the growth in commodity inventories in support of our trading activity during the year and the implementation of IFRS 16.

Oil and Petroleum Products Revenue by geography (%)



	2020	2019
Middle East	3%	3%
Africa	3%	4%
Asia & Australia	35%	29%
Europe	25%	31%
Latin America	9%	9%
North America	25%	24%

Metals and Minerals Revenue by geography (%)



	2020	2019
Middle East	8%	8%
Africa	4%	3%
Asia & Australia	55%	56%
Europe	13%	13%
Latin America	1%	2%
North America	19%	18%

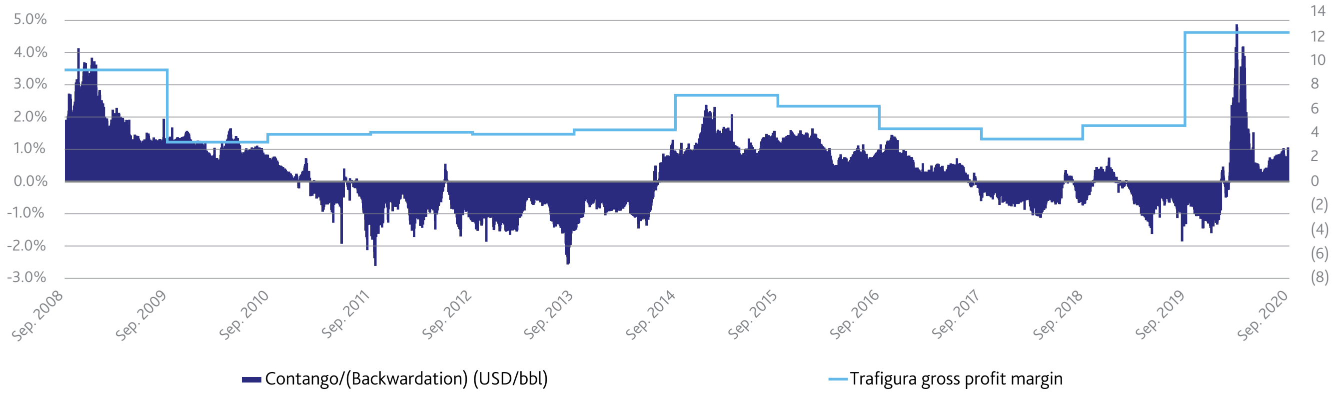
I am pleased to report that we maintained a disciplined approach to capital expenditure during the year, with net cash used in investing activities standing at USD264 million, well within our stated USD500 million envelope for the year. The increase in "acquisition of property, plant and equipment" compared to 2019 relates to Nyrstar's maintenance capital expenditures of USD252 million (Nyrstar was consolidated into the Trafigura Group in July 2019). This additional expenditure was largely offset by a USD374 million cash inflow from the profitable disposal of our non-core shareholdings in shipowners Frontline and Scorpio Tankers.

As a result of our performance and our transparent approach to communication with financial stakeholders, we maintained access to abundant funding throughout the year. We were able to refinance all of the Group's committed unsecured syndicated lines at similar levels. We accessed the debt capital markets with a bond issue in September 2020, showing that Trafigura continues to benefit from a flight to quality in commodity finance in the face of difficulties encountered by some smaller players during the year. We also continued to diversify our sources of funding – for example arranging a "low-carbon aluminium" financing facility at preferential rates.

IFRS 16 reporting

Like-for-like comparisons between FY2020 and FY2019 results are complicated by the fact that FY2020 results incorporate for the first time the new IFRS 16 reporting requirement on lease arrangements (see Note 4, page 64). All the FY2020 figures in this statement, unless otherwise indicated, include the effect of IFRS 16, the detail of which is set out in the consolidated financial statements. The comparable FY2019 figures are presented as reported in the 2019 Annual Report. The net impact of this reporting requirement resulted in a reduction in the profit for the period (after taxes) of USD26 million compared to what it would have been in the absence of IFRS 16, as well as an increase in gross profit of USD997 million and an increase in EBITDA of USD1,194 million. In addition, the requirement resulted in an increase of USD2,258 million in our total assets and a corresponding increase in total group equity and liabilities.

Maintaining profitability through the oil price cycle



Source: Company information and public market data. Contango/(Backwardation) graph is calculated by subtracting CO1 (Generic 1st 'CO' Brent Future) from CO6 (Generic 6th 'CO' Brent Future)

Income

Both our Oil and Petroleum Products and our Metals and Minerals businesses contributed to the marked increase in gross profit in FY2020, benefitting from extraordinary volatility and the emergence of contango forward price curves during the year. Gross profit in Oil and Petroleum Products was USD5,259.0 million (FY2019: USD1,681.4 million) or 75 percent of the Group total. Metals and Minerals brought in gross profit of USD1,535.4 million (FY2019: USD1,188.4 million) equal to 25 percent of the Group total.

The Oil and Petroleum Products division benefited in particular from the unprecedented market volatility, with April 2020 entering the record books as the most volatile month in history for the oil market. Our Oil and Petroleum Products traders were able to take advantage of the elevated volatility while deploying our deep understanding of physical oil flows along with our world-class risk management systems to adapt to the spread of the COVID-19 pandemic in the first half of the calendar year.

Metals and Minerals, meanwhile, maintained the trend of the last few years, steadily growing their customer base and expanding their market share of a consolidating non-ferrous metals market.

Once again, Trafigura benefits from the contribution of these two divisions, Metals and Mining and Oil and Petroleum Products, serving markets with distinct and largely uncorrelated business cycles.

Total Group revenue in FY2020 was USD146,994 million, 14 percent less than the USD171,474 million recorded for the previous year. While our overall trading volumes remained relatively flat compared to 2019, generally lower commodity prices led to a net reduction in revenue.

The total volume of commodities traded dropped marginally by 1.8 percent to 365.3 million metric tonnes, from 372.1 million metric tonnes in FY2019. Oil and Petroleum Products volumes reduced by three percent to 267.7 million metric tonnes, representing an average daily volume of 5.6 million barrels in a market that suffered a slump in demand as a result of the COVID-19 pandemic. Metals and Minerals volumes remained consistent with FY2019 at 97.6 million metric tonnes.

General and administrative expenses rose to USD2,155 million from USD1,049 million, mainly due to the implementation of IFRS16. Net financing costs were somewhat lower than in FY2019 at USD658 million as a result of the softening of interest rates this year. Income tax was USD292 million, compared to USD124 million in FY2019.

Impairments, meanwhile, jumped to a multiple of their levels last year, partly reflecting the economic impact of the pandemic on our industrial assets, including our holding in Puma Energy. The three impairment lines of the statement of income contributed a loss of USD1,568 million, compared to just USD104 million in FY2019. The largest adjustments occurred in relation to our Impala Terminals businesses in Colombia, our holding in Indian refiner Nayara Energy and our stake in Puma Energy. An itemised list of these impairments and losses can be found in Note 11 on page 69.

Balance sheet

Total assets amounted to USD56,985 million as at 30 September 2020. Non-current assets were little changed at USD11,116 million compared to USD10,777 million, despite the implementation of IFRS 16 which requires booking leasing arrangements as "right of use" assets, leading to a new non-current asset of USD2,092 million as at 30 September 2020. The current assets grew by six percent to USD45,867 million from USD43,372 million and within that number inventories rose by 50 percent to USD20,178 million. Inventories significantly rose due to an increase in volumes (51 percent for each of Oil and Petroleum Products and Metals and Minerals divisions) and movements in average prices (Brent price decreased by 34 percent and refined copper increased by 15 percent over the year). The oil contango market structure and the increase in metals prices were key drivers in the overall increase. It is worth noting that the oil inventories of 138 million barrels represent less than two days of world consumption of circa 100 million barrels per day. In accordance with Trafigura policy, 100 percent of these stocks are hedged or pre-sold.

Cash flow

The powerful performance of our trading divisions generated exceptionally strong cash flows, with operating cash flow before working capital changes of USD6,118 million, three times the figure of USD1,993 million for FY2019. Trafigura believes this operating cash flow metric is the most reliable measure of its financial performance, since the level of working capital is predominantly driven by prevailing commodity prices and price variations are financed under the Group's self-liquidating finance lines.

The growth of inventories necessitated a significant increase in working capital, meaning that net cash used in operating activities was USD658 million, compared with a net release of USD4,270 million in FY2019. This increase in working capital needs is partially matched by an increase in the use of short-term bank lines.

Investing activities resulted in a net cash use of USD265 million, compared to a net use of USD285 million in FY2019. The normal, ongoing maintenance capital expenditures of Nyrstar's plants and equipment represented USD252 million and was the principal item of the Group's capital expenditure during the year. The net cash from financing activities was a net inflow of USD413 million, compared to a net use of USD3,074 million in FY2019.

The overall balance of cash and cash equivalents as at 30 September 2020 was USD5,757 million, compared to USD6,267 million a year earlier.

Liquidity and financing

Trafigura maintained wide access to liquidity throughout the year with credit lines of USD61 billion from a network of around 135 financial institutions. The majority of our day-to-day trading activity is financed through uncommitted, self-liquidating trade finance facilities, while we use corporate credit facilities to finance other short-term liquidity requirements, such as margin calls.

This funding model gives us the necessary flexibility to cope with periods of enhanced price volatility as utilisation of the trade finance facilities increases or decreases to reflect the volumes traded and underlying prices. Trafigura also maintains an active programme of issuance on debt capital markets to secure longer-term finance in support of our investments.

During the course of the 2020 financial year, the Group completed a number of important transactions in the syndicated bank loans market, securitisation markets (notably through innovative financing solutions) and bond markets (public and private). Trafigura Group demonstrated its strong access to committed sources of funding across the globe despite unprecedented volatility throughout the period as a result of the COVID-19 pandemic. It was a strong vote of confidence in the quality of the credit and in the strength of the company's business. The Group also benefitted from a flight to quality in turbulent times for banks active in the commodity trading sector.

In October 2019, Trafigura refinanced its Asian Revolving Credit Facility (RCF) and Term Loan Facilities (TLF) at USD1,505 million-equivalent with the support of 27 banks. The transaction comprised a 365-day US dollar revolving credit facility, a one-year Chinese yuan renminbi term loan facility and a three-year US dollar term loan facility. This facility was upsized by USD130 million-equivalent post-closing via the accordion feature.

In February 2020, Trafigura completed the second phase of its USD450 million Inventory Securitisation Programme launched in November 2017. This was achieved mainly by adding the US as an eligible jurisdiction, following an amendment process with the six financial institutions participating in the platform. This improvement allowed programme utilisation to reach record levels and paves the way for the implementation of the next phase: seeking committed term financing in the asset-backed securitisation markets.

In March 2020, Trafigura simultaneously refinanced two core credit facilities and issued notes with long-dated maturities. The company refinanced its flagship 365-day European multi-currency syndicated RCF at USD1,895 million. The facility initially launched at USD1,500 million and closed substantially oversubscribed, allowing the facility to be upsized. In addition, the company decided to exercise the second extension option available on the three-year tranche of its 2018 ERCF, thereby extending the facility by 365 days and maintaining a three-year tenor. Those tranches were subsequently upsized by USD135 million in aggregate via the accordion feature.

In a separate transaction, Trafigura returned for the fifth time to the Japanese domestic syndicated bank loan market and raised JPY76.8 billion (USD720 million equivalent at spot rate) via a JPY denominated term loan. In addition to the three-year tranche, which Trafigura has refinanced every two years since 2012, Trafigura introduced an inaugural five-year tranche. Twenty Japanese financial institutions supported the Samurai Loan, demonstrating the continued interest of domestic lenders in Trafigura's credit. Five new institutions joined the syndicate, while the majority of existing lenders continued to participate and increased their amount invested.

In March 2020, Trafigura Funding SA, a dedicated funding vehicle of the company, issued USD203 million of notes in the US Private Placement (USPP) market with tenors of five, seven and ten years. For its fifth issuance in the USPP market, Trafigura achieved its tightest ever all-in financing level. Proceeds were used to refinance USD51.5 million of maturing USPP notes and to support the refinancing of Trafigura's EUR550 million bond repaid in April 2020.

Key financing milestones in FY2020:

Oct. 19	Asian RCF Refinancing (post accordion)	USD1,635 million
Mar. 20	European RCF Refinancing (post accordion)	USD1,965 million
	Japanese Samurai Loan Refinancing	JPY76,800 million
	US Private Placement	USD203 million
May. 20	Non-traditional Receivables Securitisation Programme	USD295 million
Sep. 20	USD Senior Bond	USD400 million
	Low Carbon Aluminium Financing Platform	USD500 million

In May 2020, Trafigura put in place an innovative securitisation programme to finance its receivables currently not eligible for its current Trafigura Securitisation Finance (TSF) securitisation programme. This USD295 million programme is enhanced by an insurance policy and syndicated with three financial institutions. As per the other securitisation programmes, the main purpose is to ultimately syndicate this product with institutional investors in order to continue the diversification of funding sources.

In September 2020, Trafigura Funding S.A. successfully returned to the international debt capital markets with an issuance of a USD400 million senior bond. The bond was priced at 5.875 percent, 50 basis points tighter than the Initial Price Talk thanks to very strong support from institutional investors and private banks. This issuance was marked by the quality of the order book reflected by the range and geographical diversity of investors participating in the transaction, with approximately 90 investors distributed across Asia and Europe. The various public and private debt market transactions have allowed the Group to extend its debt maturity profile.

In September 2020, Trafigura established a "low-carbon aluminium" financing platform of USD500 million, with two financial institutions supporting the design and structuring of this instrument. This is further proof that Trafigura is at the forefront of financial innovation. As the first financing of its kind for Trafigura and for the wider market, the facility was designed to meet growing demand from downstream manufacturers for low-carbon aluminium and to support upstream producers in accelerating their transition to low-carbon technologies. The platform enables Trafigura to access financing at a preferential interest rate and, in turn, to pay a premium to low carbon aluminium producers. It follows Trafigura's establishment of a low carbon aluminium-trading desk in FY2019, the first commodity trader to do so. Through this facility, Trafigura is committed to facilitating the transition towards a sustainable aluminium supply chain.

After the financial year-end, in October 2020, Trafigura refinanced its Asian RCF and TLF at USD1.6 billion-equivalent, with 24 banks participating in the transaction. The new facilities comprised of a 365-day USD revolving credit facility (USD730 million), a 1-year CNH term loan facility (c. USD590 million equivalent) and a 3-year USD term loan facility (USD278 million). The new facilities were used to refinance the maturing 3-year term loan tranche from 2017 and the maturing 1-year USD and 1-year CNH tranches from 2019, as well as for general corporate purposes.

The syndication of the Asian RCF was supported by Trafigura's strong business and financial performance during this period and its partnership-driven approach with its financing partners, which resulted in a closing amount above last year's level. Moreover, the record level reached under the CNH tranche has confirmed Trafigura's front-rank position among commodity traders in the offshore Renminbi centres and demonstrated the benefit of our financial diversification strategy.

Public ratings

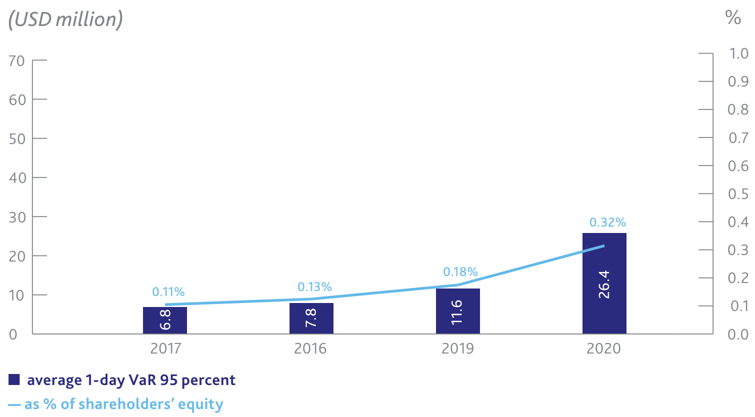
Trafigura does not hold a public credit rating and does not seek to obtain one. There are a number of reasons for this, including the fact that Trafigura's strategy has always been to obtain funding from stakeholders that understand its business model, rather than making investment decisions on the basis of a credit rating. In addition, holding a credit rating could cause Trafigura to take more short-term focused decisions in order to maintain a particular credit rating level. This would conflict with the Group's focus on long-term value creation and maintenance of a strong balance sheet. Trafigura has been highly successful in securing funding without a public credit rating. Financial discipline is inherent to the company's business and finance model due to its reliance on debt markets for capital and liquidity.

Trafigura's significant expansion of its sources of financing over the years has been achieved on the basis of the Group maintaining an acceptable and sustainable credit standing, consistent with an investment grade profile. The Group's financial discipline is reinforced by the financial covenants provided to unsecured lenders and is underlined by the strong support we receive from our banking group and investors.

Value at risk

The Value at Risk (VaR) metric is one of the various risk management tools that Trafigura uses to monitor and limit its market risk exposure.

Trafigura uses an integrated VaR model which captures risk, including commodity prices, interest rates, equity prices and currency rates (see further details in Note 35). During 2020, the average 95 percent one-day VaR for derivative positions was USD26.4 million (2019: USD11.6 million), which represented less than one percent of Group equity.



Shareholder structure

Trafigura is owned by its management and circa 850 of its senior employees, who are focused on the long-term success of the business, promoting management depth and stability, and encouraging prudent risk management. The decision as to which employees may become shareholders is discretionary based on individual performance, seniority and expected future contribution to the Group.

Trafigura has significantly built up its shareholders' equity since its inception in 1993 and the Group retains profits to further increase its capital base. Any discretionary buy-backs are subject to sufficient liquidity being available and to the company remaining compliant with financial covenants.

Leverage and adjusted debt

As a physical trading group, Trafigura relies on a specific funding model. As a result, it is not appropriate to apply the same financial analysis framework as for typical industrial companies.

For Trafigura, banks and investors have historically considered financial leverage after excluding some specific balance sheet items (e.g. inventories securitisation programmes), resulting in the use of adjusted debt as an overall leverage metric. Adjusted debt corresponds to the company's total non-current and current debt less cash, fully hedged readily marketable inventories (including purchased and pre-paid inventories which are being released), debt related to the Group's receivables securitisation programmes and the non-recourse portion of loans from third parties. This metric is a better measure of the Group's financial leverage than a simple gross debt metric.

In particular, the following adjustments are made:

- The receivables securitisation programmes are taken out on the basis that they are entirely distinct legal entities from Trafigura with no recourse to the Group and are only consolidated into the financial statements in accordance with the Group's accounting rules.
- Cash and short-term deposits are deducted from debt.
- Pre-sold or hedged stock, including purchased and pre-paid inventories which are being released, are deducted from debt. This reflects the great liquidity of the stock and the ease at which it could be converted to cash. As noted above, Trafigura's policy is to have 100 percent of stock hedged or pre-sold at all times.
- Non-recourse invoice discounting or specific portion of loans (for example, non-recourse portions of bank lines used to extend prepayments to counterparties) are deducted from debt.

As at 30 September 2020, the ratio of adjusted debt to Group equity stood at 0.35x, down from 0.78x at 30 September 2019. This reduction principally reflected the exceptionally strong retained earnings during the year. Whilst the ratio of adjusted debt to Group equity was particularly strong this year, our intention is to maintain this ratio to a level of 1x. Any upwards fluctuation of this ratio to 1x in the future should not be considered as a sign of Trafigura relaxing its disciplined effort to maintain a solid credit standing.

The Company's adjusted debt to equity ratio at the end of the reporting period is calculated as follows:

	2020 USD'M	2019 USD'M
Non-current loans and borrowings	**7,070.1**	8,492.1
Current loans and borrowings	**25,783.5**	22,455.5
Total debt	**32,853.6**	30,947.6
Adjustments		
Cash and cash equivalents	**5,757.0**	6,267.2
Deposits	**466.0**	374.2
Inventories (including purchased and pre-paid inventories)	**20,921.8**	14,137.2
Receivables securitisation debt	**2,750.6**	4,422.1
Non-recourse debt	**198.4**	437.2
Adjusted total debt	**2,759.9**	5,309.7
Group equity	**7,789.9**	6,804.7
Adjusted debt to Group equity ratio at the end of the period	**0.35**	0.78

Taxation

Trafigura operates in a multitude of jurisdictions and adheres to applicable local and international tax law, including legislation on transfer pricing, in the countries in which it operates. The Group's tax policy is to pay appropriate tax according to work carried out in each jurisdiction, as determined by a functional analysis of operations using standard measures wherever possible, underpinned by reports prepared to fulfil local transfer pricing requirements. The Group's effective tax rate – the average rate at which consolidated pre-tax profits are taxed – varies from year to year according to circumstances, and in FY2020 it was 15.4 percent (or USD292 million) compared to 12.5 percent (or USD124 million) in FY2019.

Outlook

Trafigura's FY2020 financial performance has demonstrated the Group's ability to thrive in the most extreme market conditions and the most difficult working environments.

Even when the most acute effects of COVID-19 start to recede, volatility will continue to prevail in the oil market for the foreseeable future and is also likely to increase in metals as the supply-demand balance tightens for commodities such as copper. With both of our trading divisions having deepened their customer base and demonstrated their dedication to customer service, we are confident that profits can continue on a somewhat higher plane than the average of the last five years. The Group is well positioned to operate profitably under a more normalised geopolitical, health and economic environment.

In addition, the strengthening of our balance sheet during the year has made our company even more resilient to face the vicissitudes of the post-COVID-19 recovery. Our disciplined and focused approach to capital expenditure reinforces this. Equally important, is a stronger balance sheet, coupled with the already diversified nature of our business, has created a platform for a new chapter of growth in the company's history, focused on a concerted push into the power and renewables markets and investment in the accelerating energy transition.

Marketplace review

2020: COVID-19, commodities and change

Saad Rahim
Chief Economist

The past year has been unlike any other in modern economic history. It began positively, with a strong growth trend supported by a cessation in the trade war that had plagued the global economy for much of the previous 18 months. The US Federal Reserve, the People's Bank of China and the European Central Bank were all cutting rates, creating accommodative monetary conditions for growth. Major sentiment and momentum indicators were picking up steam and equity markets were rallying strongly after a summer lull in 2019. Commodity prices followed suit. At the start of our financial year in early October 2019, Brent was at its second-lowest level of the year at USD56 per barrel, before moving upwards in a nearly straight line to touch USD72 per barrel in early January 2020. Copper did the same, touching USD5,600 per tonne in early October before moving upwards more or less continuously to USD6,300 per tonne in early January 2020. Zinc and aluminium also largely followed the same trajectory. Indeed, from the start of our financial year to early January 2020, most classes of risk assets had moved up by anywhere between five percent (non-USD FX) and nearly 30 percent (Brent).

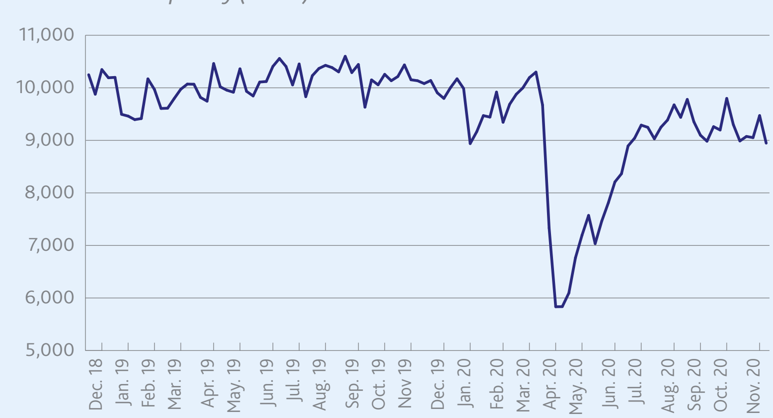
But that was before COVID-19 and the unprecedented hard stop it inflicted on global economic activity.

Whereas previous economic slowdowns or periods of turbulence were caused by weaker demand leading to a contraction of economic activity, in 2020 it was the inverse: a forced halt in economic activity implemented in quick succession across the world's major markets led to a shortfall in demand. Global air travel, which accounts for approximately 10 percent of global oil demand, fell to practically zero for a period of time, and by November 2020 had still only recovered to circa 40 percent of previous levels. US gasoline demand, which typically represents a further 10 percent of global oil demand, halved and remains over one million barrels per day below previous years' average levels. The reduction in global trade and manufacturing impacted gasoil demand. However, the fact that construction was deemed strategic, and therefore escaped the brunt of lockdowns, helped mitigate a steeper decline in demand for this fuel.

Normally, a reduction in demand of even a fraction of this magnitude would have elicited a rapid cut in production by OPEC members and associated producers. In 2020, however, disagreements among the OPEC+ group's members led to a temporary abandonment of quotas in lieu of an all-out battle for market share. The timing of the decision to do so coincided with the start of China's recovery from the impact of COVID-19, but before full realisation that the rest of the world would soon be in a situation similar to what China had just been through. The subsequent OPEC+ decision to reverse the March decision to raise output and instead cut output a month later was too little too late, and caused close to one billion barrels of excess inventories to accumulate over a very short period of time.

US Gasoline Demand

Total Output Implied Demand
Units: 1000 barrels per day (or kbd)

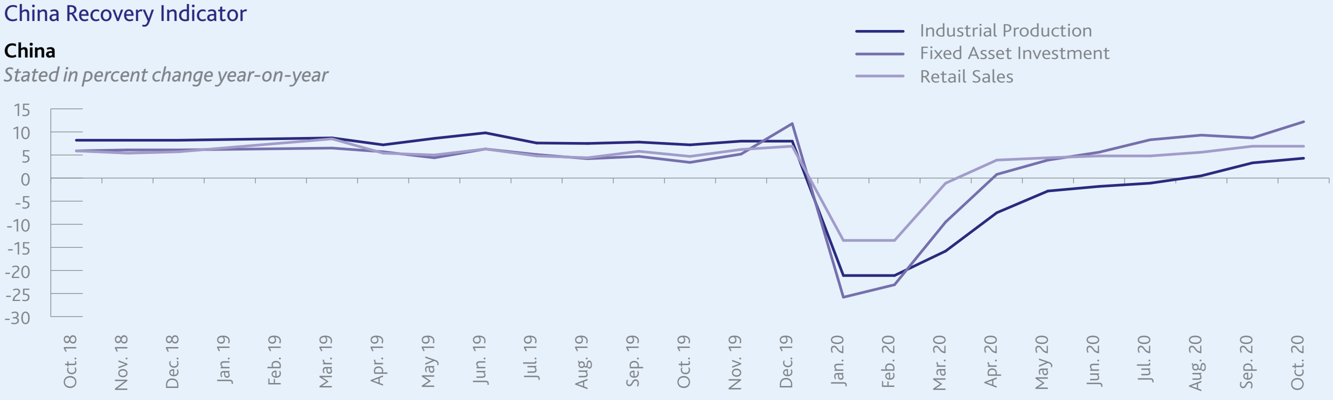


Source: US Department of Energy

China Recovery Indicator

China

Stated in percent change year-on-year



Source: China National Bureau of Statistics

As a result of producers ramping supply to never-before-seen levels at the same time that an unprecedented reduction in demand was unfolding, crude oil prices suffered significant losses. Indeed, a combination of production levels that were just beginning to come off, a massive drop in demand, and a lack of available physical storage at Cushing, the critical physical delivery point for WTI oil, briefly resulted in negative WTI price for the first time in history.

That was the situation for oil in April. But for over a month by that point, other parts of global markets were already moving higher. Much of this was due to the fact that although China was the first to experience the COVID-19 outbreak, it was also the quickest to react and the quickest to recover. The initial stringent lockdown measures in China allowed for a quick restart of activity only a couple of weeks after the end of Chinese New Year, which is normally a slow period for China in any case. This rebound was more of a supply-led one, as increased liquidity and credit meant that investment and manufacturing started back up quickly. End-use consumer demand was slower to recover initially, but picked up steam mid-year. With manufacturing, construction, investment and consumption all back on track, China is the only major economy that will record year-on-year growth for the calendar year as a whole.

Metals prices have certainly benefited strongly as a result of China's recovery, with copper rising to a two-year high and looking set to continue rising as construction, infrastructure, electrification and the roll out of 5G technology all contribute to strong demand growth. Zinc and aluminium prices have also hit multi-year highs as the global auto sector has remained an area of consumption strength, albeit after an initial drop-off during the height of the pandemic. Nickel has not quite hit the highs of 2019, but is benefitting from the increasing adoption of electric vehicles globally, and again looks set to see demand growth into the future.

Oil prices continue to be impacted and are down approximately 40 percent compared with their 2020 peak, while almost every other asset class has exceeded their year-to-date highs and in many cases reached multi-year highs. Since April, the market has seen a multi-speed recovery. China not only rebounded quickly, it is now seeing material growth over 2019's refinery runs; India's rebound took much longer, but it too is seeing some early signs of growth. However, European runs remain significantly lower versus 2019, and the US has proven the real global laggard, pointing to a tricky road ahead for the market.

Looking ahead, there are significant uncertainties that remain to be resolved for the market. The widespread deployment of an effective virus vaccine will go a long way towards helping demand and economic activity recover to previous levels, but there are long-term questions around the amount of debt that countries have taken on while dealing with the crisis. For the US, that could mean the start of a weaker US dollar cycle, which in turn should boost global growth and commodity prices, but the market will need to absorb an unprecedented amount of new debt without sending rates to levels that would hamper growth.

Longer term, two long-standing and inter-related challenges remain: the accelerating energy transition and reversing the systemic and enduring under-investment in the value chain needed to make the energy transition happen. Governments over the world are adopting more ambitious emissions reduction targets, hastening the build out of renewable power generation, expanding electrical grids, and encouraging electric vehicle adoption. The energy transition will require significantly more copper, nickel and other metals, and so far investment in these areas has been lagging behind future projected needs.

How the world deals with the overlapping issues of the COVID-19 pandemic, debt, climate change and resource investment will drive the market for the next year and beyond.

Copper price data 2015 - 2020

Trade close

Units: USD per tonne

Performance review

Oil and Petroleum Products Trading

In a highly challenging and volatile market, Trafigura had its strongest trading year on record and further secured its position as one of the world's leading independent traders of crude oil, refined products and natural gas in 2020.

Ben Luckock **Jose Maria Larocca** **Hadi Hallouche**
Co-Heads of Oil Trading

57%
Contribution to global revenue
(2019: 65 percent)

267.7mmt
Total volume traded
(2019: 274.9mmt[1])

Oil and Petroleum Products volumes traded (mmt)	2020	2019
Biodiesel	**0.5**	0.6
Bitumen	**0.8**	0.4
Condensates	**1.9**	1.5
Crude oil	**127.5**	136.3
Fuel oil	**27.0**	28.3
Gasoline	**21.6**	25.3
Liquefied natural gas (LNG)[2]	**12.9**	10.2
Liquefied petroleum gas (LPG)	**5.9**	6.3
Middle distillates	**40.0**	35.4
Naphtha	**12.0**	14.7
Natural gas[2]	**17.4**	16.0
Total	**267.7**	274.9

[1] Trading volumes have been restated to be in accordance with recognised revenue line in the income statement.

[2] Million metric tonnes of oil equivalent.

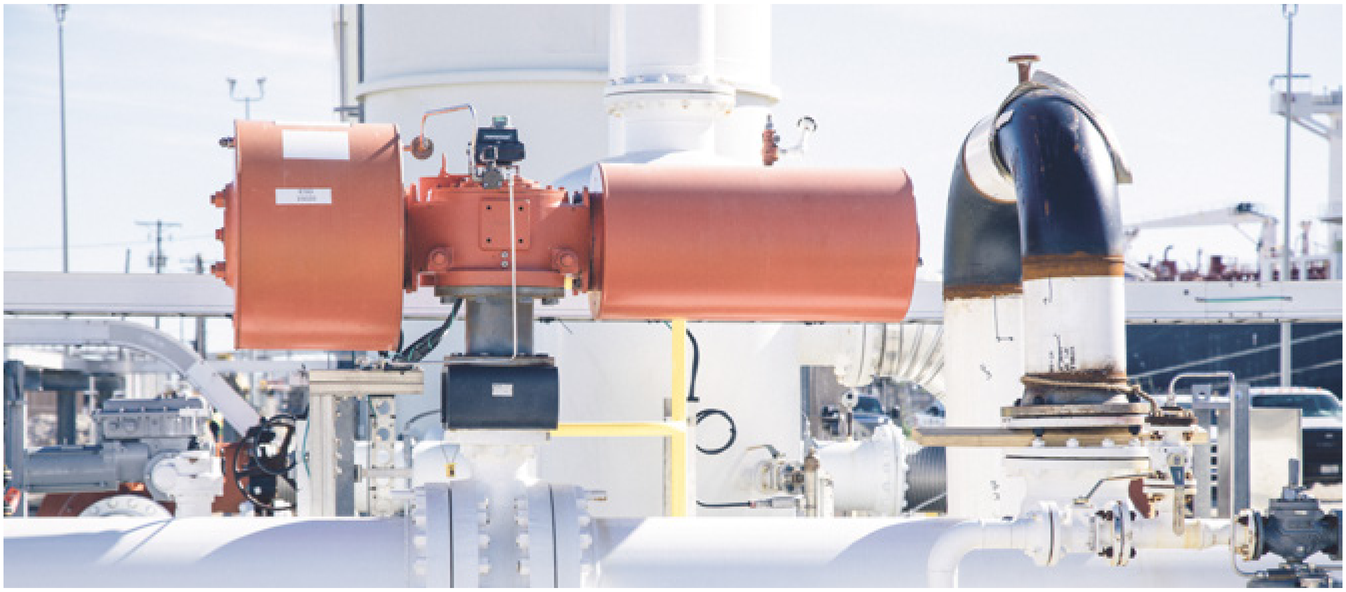
Market overview

2020 was a year like no other for the oil markets. The start of Trafigura's financial year, in October 2019, saw prices continue to drop sharply as supply recovered following the attacks on Saudi Arabia in September 2019. Following a truce in the US-China trade war and further unrest in the Middle East, macro conditions began to pick up again, but then came the biggest demand shock of all time. The emergence of COVID-19 split OPEC+ (OPEC plus Russia and other affiliated producers) in early March and saw prices drop by around 25 percent in two days from the mid USD40s to the mid USD30s range. Prices then drifted further down to the USD20 mark at the close of the first half of our financial year at the end of March, as more and more areas went into lockdown or quarantine.

Despite having fallen 70 percent from their peak in January 2020, oil prices were in for an even bigger shock in April. As markets headed into the expiry of the May WTI contract, it became apparent that there was simply not enough available storage capacity at the main physical delivery point for WTI, in Cushing, Oklahoma. This led to a first for oil markets: negative prices for one of the major marker contracts. And once prices went negative, they continued to fall, so that a contract that had opened the day at USD17.73 per barrel closed at USD-37.63, a drop of over USD55, the largest swing ever witnessed in either dollar or percentage terms. However, the negative prices allowed physical traders such as Trafigura to create and implement solutions that rapidly alleviated the bottleneck at Cushing, eventually restoring order to the market.

Following that shock, prices began to recover strongly, helped by OPEC+ cuts and the gradual removal of lockdown restrictions. The demand recovery in China in particular has been very strong, helping pull up other parts of Asia. Europe recovered well, but the US remains weak, particularly with regard to jet and gasoline demand. Both regions are now experiencing a second wave of lockdowns.

2021 is likely to bring more refinery expansions in emerging markets and a recovery in both OPEC and non-OPEC supply, but demand remains a problem that is unlikely to be resolved until a COVID-19 vaccine is widely made available.



▲ Terminal in Corpus Christi, Texas, US.

Trafigura performance

Extremely volatile conditions and market distortion throughout much of FY2020 created increased demand for the services of a large physical trading house like Trafigura in helping to manage the disruptions resulting from imbalances in supply and demand. Accordingly, our Oil and Petroleum Products Trading division had a very strong year.

Three themes emerge from the division's performance in 2020. First, we benefitted greatly from an intense focus on our customers' rapidly changing needs, ensuring that we could always be relied on for consistent and efficient service and execution, based on our global presence and real-time insights on market developments. This enabled us to deepen existing business relationships and establish significant new ones, while investing in an expansion of our global storage infrastructure.

Second, we continued to see a flight to quality and financial strength in the trading marketplace as some of the weaker counterparties were not able to fulfil contracts or provide customers with much-needed support during the first wave of the COVID-19 pandemic. This led to increased demand for larger merchant companies with strong financial backing, including Trafigura.

Third, we saw continued benefit from a renewal of our oil trading teams over the last few years. What was a relatively young and untried group two years ago has matured into a cohesive and highly collaborative trading division, which is well placed to operate effectively in volatile and fast-moving markets. The year was also marked by the quality and intensity of communications and information-sharing between different trading desks.

Looking ahead, we expect volatility and market distortion to continue, while demand will be slow to recover from the effects of COVID-19. Therefore, our focus will be on long-term collaboration and maintaining our reliable service to help us to continue to build market share.

Crude oil

In the global crude market, 2020 was a truly extraordinary year in which the economic shock and unprecedented demand destruction caused by the COVID-19 pandemic coincided with a battle for market share between key producers. The result was significant over-supply, a major build-up of stocks and a precipitous fall in prices – with WTI crude prices briefly in negative territory – followed by a gradual, though only partial, recovery to levels just above USD40 per barrel by the end of September 2020.

With the price curve showing a steep contango for much of the year, 2020 was a favourable environment for trading and the Trafigura crude team delivered a strong profit for the year. The team has been significantly strengthened over the past three years with a focus on global alignment and coordination, backed by superior market intelligence. These changes have enabled our traders to move oil quickly around the world this year – notably from the US and Europe to Asia – in response to price signals, and to deliver seamless customer service despite the difficult working conditions created by the pandemic. Key to our performance, as in 2019, was our strength in the US, where we maintained our position as the leading crude exporter, thanks in part to our access to the Cactus II pipeline from the Texas shale fields to the coast. We were also able to win increased business by providing producers access to our established relationships, global logistics network and with working capital by way of pre-payment finance.

The team managed the fall in demand and the subsequent resumption well, backing their judgment by taking substantial long-term tankage positions in Asia, the US and Europe. We expect this significantly expanded infrastructure position, and the term contracts it has helped us win, to continue to play in our favour during 2021.

www.trafigura.com/products-and-services/oil-and-petroleum-products

Gasoline

The gasoline trading team entered the 2020 financial year prepared for higher volatility arising in part from the IMO 2020 rule change on sulphur in shipping fuel. But the advent of the COVID-19 pandemic in March caused wholly unexpected and unprecedented shifts in supply and demand, with structural arbitrage reversing as traditional importing countries started to export. The magnitude and speed of the changes caught many market participants by surprise.

Trafigura reacted quickly, capitalising on its front-line position in physical trading to understand how refinery run cuts were affecting demand. Volumes handled decreased slightly, while profitability matched the already strong level achieved in 2019. Successful coordination and risk management in such a fast-changing market while traders, operators and Deals Desk professionals worked remotely was itself a significant achievement, bolstered by the close co-operation with other trading desks that is a hallmark of Trafigura's operating culture. The book's most important strategic move was to take on significant additional storage in order to take advantage from the contango price curve, notably in Asia.

In 2021, we expect the gasoline market to remain extremely volatile, with many refiners under severe margin pressure and some facing inevitable closure. For Trafigura's gasoline team, continuing to optimise activity between regions and with other trading desks will be crucial to understanding the resulting shifts in supply.

Naphtha and Condensates

Normally a by-product that refiners try to produce less of, naphtha experienced great dislocations throughout the year, becoming one of the best performing hydrocarbons in 2020. Global supply was seriously impacted by lower refinery runs, while consumption was driven by strong demand for plastics, especially in medical equipment and consumer goods packaging, and a rapid recovery in China. The condensates market broadly tracked the fall in demand and over-supply experienced by crude.

Trafigura's trading team was prepared for a volatile market at the start of our financial year, with a strategy to diversify risk. Therefore, it was able to react quickly to the unexpected events of March and April, consolidating its leading position in this market. Volume handled showed a small decrease in response to the reduced size of the market, but profitability was stronger than in 2019. This is a testament to strong teamwork and coordination, as well as a relentless and flexible focus on the needs of customers, all of whom were affected by the pandemic in different ways.

The outlook for 2021 is uncertain. We see continuing problems on the supply side for naphtha, with refinery margins under severe strain, while demand for petrochemicals is expected to be impacted by the weakness of the global economy. The net effect is likely to be continued volatility, and we will stay nimble and responsive to fast-changing trends.

▲ Atlacomulco Terminal, Mexico.

Fuel oil and Middle distillates

2020 was a tale of two halves in the global gasoil and fuel oil (GOFO) business. The start of the year was characterised by strong gasoil prices and very weak fuel oil prices as the market adjusted for lower sulphur bunker specifications required by the IMO 2020 rule change. The second half was dominated by the impact of the COVID-19 pandemic. Quarantines impacted jet demand which forced refiners to manage their jet yield into the diesel pool, significantly weakening gasoil. In addition, OPEC cuts of heavy crude supplies and refinery run cuts drastically reduced the supply of heavy sulphur fuel oil. The subsequent oversupply of finished grade products across the barrel as demand collapsed saw the market trade to levels not seen since 2008, and was only resolved through floating storage and subsequent refinery run cuts.

The Trafigura GOFO team managed risk and exposure, and ensured minimal disruption in performance for trading counterparties, whether in lifting term commitments, supplying customers, or operational execution on the water. The desk significantly increased its global storage capacity, both on land and via floating tanker solutions, to manage the oversupply and provide customers with additional flexibility. The team registered record volume and a strong profit.

A key priority, alongside managing the IMO transition, was the launch of a new bunkering business, TFG Marine (see page 29), which places the company at the cutting edge of the change in end-user specifications. The desk also launched a broader push into biodiesel trading to enhance our capabilities in renewables and to integrate biodiesel into the existing traded portfolio. We expect these business lines to continue to drive growth of the trading book over the next 12 months.

Biodiesel

Trafigura broadened its focus on trading biodiesel in 2020. We remained active in the US and started to build new business lines in Asia and Europe, as consumers and regulators continued to call for increased penetration of renewable fuels in the energy mix.

The US market gained a measure of stability with the adoption of the blender tax credit until the end of 2022. Despite this tax credit, the price relationship between fossil fuels and biofuels eliminates the opportunity for discretionary blending. As such, US market demand is effectively capped by the US Renewable Fuel Standard volumetric requirements. With abundant domestic production capacity, US production margins remain slim. Trafigura maintains key business relationships with the major independent US producers for well over 100 million gallons per year (380 million litres) of biodiesel production.

In Europe, we are adopting an arbitrage and breakbulk model, leveraging existing Trafigura and Puma Energy infrastructure, logistics and relationships to penetrate a market in which we have not been active for several years. With new hires joining the team, we expect the biofuel business to become an increasingly important element of our gas oil and fuel oil book in 2021.

Liquefied petroleum gas

The COVID-19 pandemic made for a volatile year in the liquefied petroleum gas (LPG) market on both demand and supply sides. Commercial and auto gas consumption were negatively affected, but petrochemical cracking and household consumption increased. At the same time, fluctuating refinery runs and a drop in crude production greatly affected the availability of LPG worldwide. This created volatility in prices with a steep drop in flat price in April and May, and a subsequent recovery from June onwards.

In 2020, the Trafigura LPG book went through an important transformation, creating a structure that enabled the trading of volatility via large positions in all pricing centres and optimising between them. Volumes remained flat at close to six million metric tonnes and profitability also remained comparable to 2019 figures.

The outlook for 2021 is complex, with possible refinery closures likely to continue to weigh on supply. One theme we will be pursuing actively in the coming year is the environmental sustainability of LPG, for example, as a substitute for wood in domestic cooking.

Liquefied natural gas (LNG) and Natural gas

Substantial LNG supply overhang remained a key theme as we entered the financial year. Coupled with significant demand destruction in early 2020 caused by COVID-19, we saw record low prices, large scale cancellation of US cargoes and a subsequent fall of LNG production from 2019 levels despite production capacity actually increasing.

In this challenging environment, Trafigura demonstrated the benefits of having a fully integrated LNG and natural gas team. Close coordination between regional gas traders, physical LNG traders and charterers ensured that information was shared instantaneously to enable a prompt and effective response to volatile markets.

In LNG, we went from strength to strength, growing volumes, delivering to new markets and sustaining profitability. Relationships are at the heart of our business and we were able to work with our key counterparties to rebalance deliveries and take account of the changed situation, strengthening trust between us and our end-users.

The vast majority of our US LNG output flowed to Europe, benefitting our growing European natural gas operation. Coupled with favourable spreads, this enabled us to build out storage positions and expand into new countries in Eastern Europe. In the Americas, it was a year of building up our Texas business and increasing the volume of gas traded in Mexico and Argentina.

We expect the LNG market to remain structurally oversupplied for at least another year, but the lack of final investment decisions on new projects, as a result of weak prices and COVID-19 uncertainty, is likely to result in a substantial tightening of both the LNG and US gas markets from 2022/23. Gas remains the critical transition fuel to achieve the decarbonisation goals adopted in the Paris Agreement; therefore, we expect the pace of activity and the number of participants in these markets to increase over the coming years.

▼ The Marlin Amethyst, our first vessel to be fueled with our new biofuel at the Port of Amsterdam.

Performance review

Metals and Minerals Trading

Trafigura is one of the world's largest traders of non-ferrous concentrates and refined metals and bulk minerals. Despite the challenging global conditions experienced throughout 2020, the division had one of its most profitable years on record.

Non-ferrous concentrates and refined metals

Amin Zahir
Head of Metals and Minerals

43%

Contribution to global revenue*
(2019: 35%)

20.9mmt

Total volume traded
(2019: 19.9mmt)

Non-ferrous concentrates and refined metals traded (mmt)

	2020	2019
Non-ferrous metal concentrates	**11.0**	10.6
Non-ferrous refined metals	**9.9**	9.3
Total	**20.9**	19.9

www.trafigura.com/products-and-services/metals-and-minerals

*Metals and Minerals revenue as percentage of Group revenue includes bulk minerals.

Market overview

The global non-ferrous market in 2020 was dominated and defined by the impact of COVID-19. Put simply, it came down to a trade-off between both primary and secondary supply disruptions and demand destruction.

The supply and demand for each metal was largely determined by geography. For instance, due to mine disruption in South America, copper and, to a lesser extent, zinc faced greater losses in production than in consumption, as demand was more resilient than for other metals. Aluminium, on the other hand, faced only minor supply disruptions, almost exclusively in the scrap market, but suffered a collapse in demand owing to its larger exposure to the automotive and aerospace sectors.

Looking ahead to 2021, while the general expectation is that COVID-19 disruptions will be significantly less, other risks to supply, such as industrial action, remain very real.

Crucial in defining the future supply-demand profile of each metal will be the extent of governmental economic stimulus packages focused on infrastructure and the electric vehicle revolution. Although COVID-19 has materially impacted near-term balances of non-ferrous metals, the outlook from 2025 onwards is bullish for the whole sector.

Trafigura performance

During 2020, the Non-ferrous Metals and Minerals department recorded its most successful performance.

It was also the first full year after restructuring the department into four books: copper; zinc and lead; nickel and cobalt; and aluminium – in each case handling both refined metals and concentrates. Merging refined metals and concentrates trading, which had previously been managed separately, proved successful, enabling the four book heads to define clear and consistent strategies for each metal and to extract more value from the interplay between concentrates and metal.

Maintaining a consistent presence in all markets contributed to strong performance, particularly our large presence in the China domestic market. Combined with a renewed commitment to research and analysis, this restructure has placed us in a unique position to anticipate key market trends.

During the year, we saw past investments and strategic decisions bear fruit, notably making continued strides in improving our internal systems for operational control. Trafigura's proprietary 'Titan' trading platform provides an advanced system of checks and controls, monitoring every link in our global operations chain. Our systems also helped to facilitate the successful integration of Nyrstar.

▲ Copper cathode and concentrates being prepared for export, Ndola, Zambia.

The year also saw the establishment of a non-ferrous metals business development unit, which integrated well with the trading books and added significant value in deal origination. Our colleagues in Structured and Corporate Finance and Treasury surpassed themselves in growing our ability to provide financing solutions to support our customers, counterparties and stakeholders. This, together with our financial strength and liquidity, means we are well positioned to take advantage of new market opportunities in the coming year.

The most important component, as always, is the support from our customers, clients, suppliers and stakeholders. They recognise that our revenues are produced not at the expense of counterparties but from managing and optimising large flows in markets and geographies through long-term relationships that have been developed over the past 25 years. We are optimistic that we build on the success of this year in 2021 and we expect to see continued progress from the Metals and Minerals department.

Copper

Like many other globally traded commodities, copper experienced significant demand destruction in 2020, but this was coupled with significant disruption on the supply side, notably in terms of scrap supply and primary production in Latin America. Once demand returned after the initial shock, a tight supply-demand balance became evident in the latter part of the year, supported by copper-friendly government economic stimulus policies. As a result, prices quickly rallied in May in what became a V-shaped recovery.

Trafigura's newly integrated copper desk, with trading of concentrates, refined metal and derivatives united in one department, had an exceptional year, growing volumes and market share and recording a substantial profit. Integration created an enhanced dialogue between individual teams, better understanding of the constantly changing environment and an improved capacity to service customers and seize trading opportunities. The trading of ancillary metals, by-products of our copper concentrates business, was also a beneficiary of the integration and experienced growth throughout the year.

Such benefits helped us overcome the challenges of working remotely for several months. They also enabled us to support our customers in challenging market conditions, in the process building market share and securing long-term flows. We put in place many financing deals to support our customers in the early stages of the pandemic when copper prices were weak, creating long-term commercial relationships with producers of copper and gold that will contribute to the book's forward flows. The end result was substantial new business that is noteworthy given the maturity of our presence in the copper market.

Looking forward, we see a bright future for copper as a result of growing demand for electricity and government policies aimed at economic recovery and combatting climate change. The latter include incentives for the purchase of electric vehicles and Europe's Green Deal support package for clean energy. Global investment in power grids is also increasing – a trend we expect to continue in the future. This will likely result in a significant copper supply gap that will drive prices higher to incentivise new production. We believe our integrated team will be well positioned to trade in this market and effectively service our growing customer base.

▲ Zinc at Nyrstar's smelter in Pelt, Belgium.

Zinc and lead (refined and concentrates)

In zinc concentrates, the global market swung from surplus supply in 2019 to a deficit, while the lead concentrates market had a more balanced position in 2020.

The COVID-19 pandemic, from February, significantly constrained mine and transport capacity globally, in particular in Latin America, reducing global mine production by 8-12 percent. This in turn led to a market deficit for zinc concentrates and a more balanced-to-tight market for lead concentrates, as evidenced by the fall in treatment charges from January/February to September.

As the world adapts to the COVID-19 pandemic, mine disruptions are expected to significantly reduce with the global market returning to a more stable trajectory of mine supply.

On the refined metal demand side, lockdowns across the globe, with varying timelines and severities, resulted in supply bottlenecks and demand destruction across all sectors and regions, causing significant disruptions for both the zinc and lead markets.

In terms of supply, constraints in the lead scrap supply chain resulted in losses of lead metal output, with a number of secondary smelters closing for a period of time. In zinc, while metal production disruptions were limited, especially compared to mine disruptions, demand was heavily impacted and particularly hard-hit by weakness in the automotive sector. As a consequence, both lead and zinc metal markets experienced sizable surpluses, with exchange stocks increasing throughout the second quarter of 2020.

Since June, there has been a significant rebound in demand for both metals, primarily led by China, with a strong recovery across most sectors in the third quarter.

Europe has also recovered well and we see continued pick-up across all markets into the fourth quarter. We remain positive about demand for both metals on a forward-looking basis, with continued support from both construction and automotive industries through 2021 and beyond.

From the performance point of view, the lead and zinc trading desks were well positioned to adapt to this market change. Looking forward, we will continue to focus on developing strong customer relationships and keep consolidating the synergies between the global trading book, mining assets and the Nyrstar smelting business.

Alumina and aluminium

The COVID-19 pandemic led to severe demand destruction for aluminium across the world as the automotive and aerospace industries that account for a large share of consumption suffered disproportionately from the economic shock. One bright spot was the packaging market, as sales of pharmaceutical products and beverage cans thrived. Demand improved in China in the second half of the financial year but remained weak elsewhere, causing the Chinese import arbitrage for aluminium metal to open for the first time in several years. Aluminium supply remained largely uninterrupted by the crisis, which caused a large global surplus of metal. However, aluminium prices recovered from lows reached in the second quarter with strong capital inflow from investors seeking an inflation hedge.

Meanwhile, the alumina market has remained stable over the course of the pandemic. Alumina prices returned to lower more long-term average prices and production capacity resumed to more normal levels following the supply problems of 2018-2019.

Overall, Trafigura's trading volumes increased again this year and we were able to further strengthen our position as the largest global independent alumina and aluminium trader. The team's customer-centric approach forged further long-term customer relationships, which significantly enhanced our trading volumes.

The outlook for 2021 is very much framed by the recovery from the virus. Demand is expected to return slowly to pre-pandemic levels. Despite this, higher aluminium prices mean supply growth will continue. This disconnect between strong futures markets and weak fundamentals will fuel the growing supply overhang. We believe we can continue this year's growth by further building sales that add value to our customers and by supporting our supply sources in a difficult market environment.

Decarbonisation of the industry is becoming a vital issue for the aluminium market. Many customers in the automotive, construction and packaging sectors are increasingly focused on delivering sustainable and low-carbon products to their consumers. In 2020, we became the first commodity trading company to establish a low-carbon aluminium trading desk and a low-carbon aluminium financing platform of up to USD500 million. Natixis and Rabobank supported Trafigura in the design and structuring of this innovative instrument. Our future objectives are to secure long-term low-carbon aluminium supply for our customers, to support the efforts of our business partners as they invest in decarbonisation and ultimately to create efficient linkages between suppliers and end-users.

Find out more about this initiative here: www.trafigura.com/responsibility/case-studies/

Nickel

Nickel demand held up well in 2020 despite COVID-19, marginally contracting by 2.4 percent. Record high stainless steel consumption in China in the second half of 2020, as well as the growing requirement for nickel in batteries, have partially offset a sharp demand drop in other sectors and regions. At the same time, global nickel supply continued to rise as a result of a significant increase of nickel pig-iron (NPI) production in Indonesia, which exceeded the supply cuts in the rest of the world, tipping the market into a surplus.

Trafigura's nickel team helped counterparties maintain their operations during the crisis by expanding the range of services we offer them in order to counteract extremely volatile demand. We also maintained our strong position across all regions while significantly increasing our nickel concentrates volumes through long-term offtake agreements. We increased trading in NPI out of Indonesia and nickel sulphate in China and the rest of Asia, and traded record volumes in India.

Looking ahead, we maintain a positive outlook on the metal fundamentals, particularly owing to the growing electrification of transport as a result of green stimulus policies being implemented around the world. While we expect small surpluses in the next two years due to a continued increase of NPI production in Indonesia, the growing uptake of nickel for electric vehicles will still require additional high-grade supply from new projects in the longer term, which in most cases require prices substantially above the current levels to become economically feasible.

Cobalt

Cobalt market fundamentals remained robust throughout 2020, as COVID-related supply disruptions outweighed the negative impact of the pandemic on metal consumption. In 2020, we saw a continued drop in artisanal supply from the Democratic Republic of the Congo (DRC) as well as pandemic-related supply cuts from nickel operations producing cobalt as a by-product. In addition to the growing demand for EV batteries, cobalt consumption was supported by the shift to 5G that continues to gain pace in China and the subsequent increase in average cobalt loadings in smartphone batteries, which negates the impact of the recent drop in phone sales.

Trafigura continued to support its trading partners over the course of the year. The impact of COVID-19 on producers, particularly in the DRC, resulted in significant operational disruption and reduction in volumes. That disruption extended to the Mutoshi Pilot Project – an artisanal small-scale mining formalisation project in the DRC operated by concession holder Chemaf and supported by the NGO Pact and Trafigura. Owing to risks related to COVID-19, the project was suspended in March.

Over the course of the year, Trafigura maintained its market share by trading steady volumes of cobalt hydroxide and continuing to service its customers in spite of supply and logistics interruptions, while maintaining a strong commitment to the enhancement of responsible sourcing standards for cobalt. The company has played an active role in industry forums on such matters and has continued to support the World Economic Forum's Global Battery Alliance (GBA) – both financially and via Trafigura's participation on the GBA's Executive Board and Steering Committee.

In 2021, we expect the cobalt deficit to widen, as demand trends continue to gain momentum, indicating a need for additional supply.

▼ The Terrafame Talvivaara nickel mine in Sotkamo in Finland.

Performance review

Bulk Trading

Our iron ore business had another strong year in 2020.
However, the coal market continued to face a number of challenges.

Bulk minerals

Ken Loughnan
Head of Bulk Trading

76.7mmt

Total volume traded
(2019: 77.3mmt)

Bulk minerals volumes traded (mmt)

	2020	2019
Coal	**56.9**	59.4
Iron ore	**19.8**	17.9
Total	**76.7**	77.3

Coal

"Industrial activity was impacted by COVID-19 and prices fell sharply."

The year in the thermal and coking coal markets was characterised by an abrupt contraction in demand as industrial activity was impacted by COVID-19 and prices fell sharply. This was subsequently followed by a corresponding correction in supply. The main thermal coal indices of API2, API4 and Newcastle traded towards lows not seen since 2015, and in the case of Indonesian indices, to levels not seen since they were first created. For much of the year, thermal coal continued to be priced out of the generation stack by cheap gas wherever utilities could make the switch. Coking coal prices were down by an average of about 15 percent year on year.

Global seaborne thermal and coking coal trade in 2020 was between 10 and 15 percent lower than in 2019. Every trade flow was impacted by COVID-19. The Atlantic thermal market was particularly affected, with flows into the Pacific closed completely as US, Colombia and South African exports fell. In addition, China continued to ration import demand for thermal and coking coal through the application of their quota system, which frustrated imports and placed further weight on seaborne prices, despite the arbitrage favouring imports at record highs.

Pre-pandemic, our objectives for the year were to consolidate Trafigura's position as a reliable liquidity provider to our producers and customers across all the products we trade in (thermal, coking coal and coke), and to continue to develop growth markets in South East Asia, India and South America. However, after COVID-19 hit, our focus switched to mitigating the impact of the disruption caused by the pandemic on our suppliers and customers by readapting our cargo flows to meet fluctuating regional demand.

Overall, trading volumes were stable across all coal types traded. Thermal coal volume and profitability were in line with last financial year. Coking coal and coke volumes traded were in line with the previous year but profitability was impacted by a sharp fall in liquidity in destination markets resulting from reduced steel industry demand. Notably, having a global network with local representation across all major markets was very important during a period when international travel was not possible.

Coal continues to be replaced in the generation stack by renewables as the energy transition accelerates. For 2021, our priority is to continue to service our existing markets and customer base. Permanent mine closures in certain markets provide a supportive environment in the short to medium term.

▲ Vessels loading iron ore at Porto Sudeste export facility, Brazil.

Iron ore

The COVID-19 pandemic significantly affected the iron ore market's supply-demand structure as well as the direction and volatility of prices. Seaborne demand remained inelastic owing to the difficulty of abruptly ramping industry processes up and down. Early containment of the coronavirus supported recovery in China, which remains the global clearing market with a 70 percent share of demand. At the same time, mining production was marginally disrupted due to the coronavirus and by adverse weather in some producing regions. As a result, the iron ore price grew steadily, surpassing the previous year's surge following the tragic Brumandinho dam rupture in Brazil in January 2019.

Trafigura's physical iron ore trading team had a strong year in terms of volume and profitability. Our supply chain for Brazilian iron ore through the Porto Sudeste export terminal continued to gain a reputation for reliability and consistency, and we concluded new term sales agreements with several European steel mills. In addition, a number of term contracts were signed with mills in China, complementing the regular spot business. Regions that have been a key focus for growth include Southeast Asia, where new steel-making capacity is being commissioned, and Europe, where we have gained market share by converting spot sales into long-term contracts.

Also important to the book's development has been the expansion of the portfolio beyond our captive volumes from Porto Sudeste to include origins. These now include Australia, Brazil, Canada, India, Mauritania, Mexico, South Africa and Sweden.

Looking ahead, we expect steel production to rise outside of China, making the iron ore market less singularly dependent on Chinese demand. The fundamental outlook for iron ore is a fine balance between supply and demand. Our priority is to work on expanding the seaborne trade and increasing Porto Sudeste's market share in supplying Asian and European steel mills.

Performance review

Shipping and Chartering

Trafigura Maritime Logistics arranges shipping and freight services for Trafigura's commodity trading teams and for third-party clients. It operates as a service provider, securing competitive and reliable freight for in-house oil, metals and minerals traders. The Wet and Dry Freight desks also function as profit centres in their own right.

Andrea Olivi
Head of Wet Freight Shipping

Alan Cumming
Head of Dry Freight Shipping

4,225

Shipping and Chartering fixtures
(2019: 4,173)

2020 Wet and Dry Freight activity

	Wet	Dry
Number of fixtures[1]	**3,098** (2019: 3,001)	**1,127** (2019: 1,172)
Average number of vessels under time-charter[2]	**160-180** (2019: 100-120)	**40-45** (2019: 45-50)

1. Approximately 70% of our wet cargo programme is on third-party owned ships
2. A vessel on hire for more than three months (excludes gas carriers)

"We consider the maritime crews as the unsung heroes of 2020, and it is very much thanks to their hard work and perseverance that global oil trade continued to function throughout this challenging period."

Wet freight

The last 12 months may well be recorded as the most volatile year in the tanker industry's history. We witnessed the attack on the Abqaiq terminal in Saudi Arabia, US sanctions against the Chinese shipping company Cosco's fleet, and COVID-19 and accompanying sharp moves in oil prices, culminating in a crisis over tanker crew changes. For tanker owners, this created unprecedented volatilty, with super-contango in the oil market pushing tanker earnings to an all-time high throughout calendar Q2 and down again to operating expense levels by end of the third quarter.

The Trafigura wet freight team delivered a robust performance and increased profitability compared to 2019, making this our best year on record. At the start of the financial year, we were expecting significant fuel price disruption because of the incoming IMO 2020 sulphur cap regulations, as well as stronger market fundamentals due to the continuing increase in US exports and an ageing tanker fleet profile. This led the team to build a long freight position across all segments with a blend of shorter and longer period deals. Owing to the optionality and length within our freight book, we were able to respond effectively to the exceptional events that took place throughout the year. Over the course of the year, our fleet increased by almost 70 percent; at the peak, we controlled more than 220 owned and time-chartered vessels (excluding LNG carriers). Cargo volumes increased marginally compared to 2019.

One of the biggest challenges faced was to operate a large fleet with more than 80 percent of the team working from home due to COVID-19 related lockdowns. Furthermore, the crew change crisis – with thousands of seafarers from across the globe stranded on ships, continuing to work but unable to be relieved – added a new layer of complications and difficult conditions for crews. On Trafigura-owned and bareboat vessels, we implemented an additional hardship payment for crewmembers who, due to COVID-19 regulations, had to spend overtime on-board. We consider the maritime crews as the unsung heroes of 2020, and it is very much thanks to their hard work and perseverance that global oil trade continued to function throughout this challenging period.

We are currently witnessing a rapidly changing industry with more oil and trading companies coming into the market, willing to pay considerable premiums to access time-charters. The increase in bidding activity is pricing time-charter rates to levels in excess of spot and forward freight market curves. With companies seeking to cover more and more of their cargo base via internal time-charters, the number of available cargoes in the spot market is expected to be reduced, thus resulting in a drop in earnings.

▲ Trafigura Suezmax vessel the Marlin Shikoku sailing through the Bophorous Strait.

We believe that the fundamentals for the next six to 12 months are not encouraging, mainly as a result of demand destruction for oil and continued OPEC+ production cuts.

Furthermore, we anticipate that more tankers will come out of floating storage, putting more pressure on the supply side. We expect to redeliver more than half of our current time-chartered fleet by the end of 2020 calendar year. We also anticipate becoming more active in the spot market, which we believe will offer a cheaper solution to ship our cargoes. A priority for next year is to continue improving the ways we manage and reduce CO_2 emissions.

Dry freight

The dry freight market in 2020 was defined by two significant events: IMO 2020 and COVID-19. IMO 2020 regulations caused some initial disruption, with fuel prices rising steeply from November to January. However, prices levelled sooner than had been anticipated. The COVID-19 pandemic, on the other hand, had a significant impact on the market as cargo volumes dropped sharply and disrupted traditional trade patterns.

Thermal coal trades experienced the greatest impact. Annual volumes declined by over 100 million metric tonnes year-on-year through demand destruction and subsequent mine closures. However this drastic loss of cargo was partly offset by record soya bean volumes flowing from Brazil to China.

While cargo volumes dropped globally, inefficient trading through increased ballasting, crew change delays and record congestion in China maintained vessel demand and offset the full impact.

In terms of prices, volatility remained a key characteristic of the market throughout the year, as was witnessed with the Cape market starting the financial year at USD24,402 per day, falling to a low of USD1,992 in May and subsequently climbing to a high of USD33,760 in July. The last three months of the financial year saw a broad recovery in the dry freight complex.

Trafigura's dry freight volumes and fixtures, unsurprisingly, fell year-on-year. However, profit increased by nine percent, yielding a record year for the desk in what were chaotic market circumstances. Apart from the difficulties created by the disruption to normal working practices, both to ours and our counterparties, the biggest challenges were uncertainty over national regulations relating to COVID-19 and the immense hardship experienced by seafarers who could not leave vessels because of travel restrictions.

In the next 12 months, we expect the market balance to depend heavily on how the coal market evolves. Freight rates and volumes are certain to be volatile, and while the overall freight market is likely to remain depressed, continued inefficient trading of the fleet will cause temporary spikes in demand. Our focus will be on increasing cargo volumes while further improving our operational efficiency and how we measure, report and reduce CO_2 emissions produced through our activities. For further details on our sustainable shipping initiatives, see our 2020 Responsibility Report.

"The dry freight market throughout 2020 was defined by two significant events: IMO 2020 and COVID-19."

www.trafigura.com/products-and-services/shipping-and-chartering

Performance review

Industrial and financial assets

In 2020, strategic investments and alliances with carefully selected counterparties continued to further extend the scope of our activities and service offer.

Trafigura Mining Group

Trafigura Mining Group has invested in a portfolio of mines in Africa, Latin America, North America and Europe, ranging from wholly-owned facilities to joint ventures and minority investments. The Mining Group generates equity value for Trafigura Group and traded volumes for our metals trading books, and provides advisory and support services to the rest of the Group.

Globally, this was a challenging year for the majority of our mining assets. The COVID-19 crisis had a far-reaching impact – both directly, where mines were explicitly ordered to suspend operations, and indirectly, by creating difficulties in logistics or in moving people.

Separately, MATSA, our Spanish 50:50 copper joint venture with Mubadala, regrettably suffered two fatal accidents, its worst safety performance on record. Production on site was also heavily impacted by a regional forest fire in August which forced the temporary suspension of activities and evacuation of the area. The accidents have prompted a comprehensive and wide-ranging reevaluation of safety culture at the site and an employee consultation process is ongoing.

Despite these challenges, MATSA remains our flagship operation with copper equivalent production approaching 100,000 metric tonnes per annum, a production rate similar to last year. The site continues to benefit from a high-quality, long-life mineral reserve and an ever-increasing mineral resource thanks to successful exploration campaigns.

The Catalina Huanca mine in Peru was the worst affected by COVID-19; it was forced to suspend operations twice during the year. Otherwise, it operated efficiently each time mining was allowed to resume, with management reopening operations quickly and safely. Catalina Huanca is currently transitioning to a new, large-scale mining method known as sub-level open-stoping, which is similar to the technique in use at MATSA and will significantly and safely reduce operating costs.

The Castellanos zinc and lead mine, a joint venture between Trafigura and Cuban parastatal Geominera, had a very difficult year. COVID-related restrictions relating to the movement of people into and out of the site impacted efficiency and created bottlenecks in the supply of spare parts and in maintenance operations. The site still managed to process 1.1 million tonnes of ore, against the original design capacity of one million tonnes.

▲ Nyrstar's Myra-Falls mine in British Columbia, Canada.

The Ipe iron ore mine in Brazil's Minas Gerais province performed well and benefitted from higher iron ore prices. The life of the operation has been extended from the original planned closure date of 2021 to 2024, thanks to the ingenuity of our local staff. Meanwhile, construction on our Tico Tico project, the long-term extension of Ipe, is expected to start in 2021.

The Mining Group has continued to manage the Canadian mine belonging to Nyrstar Group, which was absorbed into Trafigura in July 2019, two months before the start of this financial year. We placed the Langlois mine in Quebec in December 2019 under care and maintenance in line with the mine closure plan, and are ramping up the Myra Falls mine in British Columbia, working on structural and organisational improvements.

Trafigura Mining Group continues to focus on implementing and improving high operational standards across our portfolio in areas such as safety, maintenance, human resources, geology and mining, budgeting, community relations and environmental and project management.

Galena Asset Management

Galena Asset Management, Trafigura's wholly owned investment subsidiary, operates a number of funds investing in mining and related assets and offers third-party investors the opportunity to invest alongside Trafigura on an equal basis.

During 2020, Galena's investments benefitted from strategic decisions put in place to meet the ongoing challenges arising from the global pandemic and its impact on logistical chains.

Galena Private Equity Resources Fund

This fund was launched in 2012, became fully invested in 2017 and holds positions in three assets: Finnish nickel, zinc and cobalt producer Terrafame; Utah-based bituminous coal producer Wolverine Fuels; and the Mawson West copper mine in the Democratic Republic of the Congo.

In January 2020, Galena Asset Management assisted Wolverine Fuels in refinancing their debt to provide additional comfort in terms of cash flows. Continued support from Trafigura was crucial, in the form of a new USD100 million revolving credit facility.

Terrafame

Terrafame currently represents Galena Asset Management's single largest investment. The company performed well in 2020, continuing to deliver strong growth on all fronts, with improved production, higher net sales and stronger profitability.

The company has reached an agreement with Galena Asset Management and its other investors on funding arrangements and further financing to ensure the continued development of its operations during the uncertain market conditions and to finalise the implementation of the nickel sulphate project. Output from the latter will help meet growing demand for the use of nickel sulphate in electric vehicles batteries.

Galena Multistrategy Fund

This fund, established with an initial allocation of USD45 million in November 2018 to invest in liquid, commodity-related strategies across multiple asset classes, performed relatively well in a complicated global commodity and macro environment. This year has been particularly challenging across asset classes as correlations broke normal patterns and volatilities remained high.

Upstream opportunities

The recent price dislocation in the oil market has dramatically increased the M&A activity in the upstream sector. Galena Asset Management will select the most attractive opportunities from a risk adjusted perspective and that can be optimised in terms of production efficiency.

Renewables

In line with Trafigura's investment programme in the renewables sector, Galena Asset Management will work with Trafigura to provide investment opportunities in this arena for external investors.

Impala Terminals

Impala Terminals owns and operates a variety of port, logistical, storage and transportation assets that support Trafigura's commodity trading business in the Americas, Europe, the Middle East and Africa. These assets are held separately from those included in Trafigura's joint venture with IFM Investors formed in 2018.

Impala Terminals reported a robust performance across the majority of its operations, despite the overall global decrease in the flow of goods and recurrent supply-chain challenges caused by the COVID-19 pandemic.

Throughout the year, Impala Terminals invested significantly in training, protective equipment and additional on-site operational measures to ensure the continued safe working conditions for its staff, contractors and customers. Regrettably, despite the existence and application of these preventative measures, a crewmember on one of Impala Terminals' Colombian fluvial operations contracted COVID-19 in May 2020 and subsequently passed away in July 2020.

Impala Terminals' African assets in Zambia and the Democratic Republic of the Congo (DRC) had a busy year with business expanding briskly, including the growth of traditional copper export flows and newer import volumes, principally chemicals for use in the growing African mining industry. Impala established new office and storage space in the Ndola and Kolwezi warehouses in Zambia and the DRC, respectively. Furthermore, it increased regular bi-directional rail services to ports in Angola, South Africa and Tanzania. In 2021, Impala will continue to focus on growing volumes and its import business.

"Our African assets had a busy year with business expanding briskly."

In Colombia, where Impala Terminals operates an inland port at Barrancabermeja and a barging operation from the Atlantic ports of Barranquilla and Cartagena, the government has pledged to dredge the Magdalena River by mid-2021, which will enable deeper draughts and increased volumes of cargo. Despite the current limited barge payload, due to river depth, Impala Terminals was still able to transport over 1.3 million metric tonnes of oil, dry and product cargoes from Barrancabermeja port in 2020. From 2021, now that Barrancabermeja is registered as an international port, Impala Terminals' Colombian operations will be able to export coffee beans by container.

In Chile, Impala's four sites, in Coquimbo, Arica, Antofagasta and Copiapo, expanded steadily throughout 2020. Storage capacity grew to 200,000 metric tonnes to support Trafigura's concentrates trading business and Chilean and Bolivian exports from mining companies. In 2020, Impala serviced more than 700,000 metric tonnes of concentrates, 400,000 metric tonnes of which was exports from and deliveries to local smelters on behalf of Trafigura. The Trafigura-funded terminal at the Codelco-owned port of Barquito is expected to come on line in the first quarter of 2021 and the facility will be managed by Impala Terminals. It will also seek to expand capacity in the north of the country to cater for Trafigura's growing business in the region.

In Bolivia, operations were hampered by a six-week closure as a result of government measures to contain the spread of COVID-19. Since this time, operations have resumed as normal.

Meanwhile, at the Burnside terminal in the US state of Louisiana, the drop in the volume of US coal exports and a challenging alumina market caused a 40 percent fall in throughput volumes compared to 2019, prompting significant cost cuts. Looking forward, Burnside plans to diversify its offering by entering new product cargo markets and will seek to transform part of the site into a photovoltaic solar farm.

In Dubai, Impala Terminals Middle East upgraded and expanded its facility and diversified cargoes handled. The impact of the COVID-19 pandemic was minimised due to the diversity of services provided and goods handled and the strategic location of the port.

Impala Terminals continues to manage the challenges associated with climate change and the transition to a low-carbon economy. It will continue to measure and manage its emissions, in line with Trafigura Group's climate change strategy.

Nyrstar

Trafigura became 98-percent shareholder of leading zinc and lead processing business Nyrstar in July 2019 after a financial restructuring, and the company was fully integrated into the Trafigura balance sheet at the end of that month.

In its first year consolidated into the Trafigura Group, Nyrstar made solid progress through operational improvements and an investment programme to restore production stability. However, the Division showed a net loss of USD146 million, reflecting the ongoing recovery from financial difficulties of recent years. Given the distressed situation of Nyrstar before the acquisition date of 31 July 2019, prior result figures are not comparable to the current year performance.

A key priority for Nyrstar under new ownership was to restore stable production which had been seriously impacted by the company's prior financial difficulties. Capital investment during the year amounted to USD280 million, with a similar figure planned for FY2021. This has enabled Nyrstar to replace important plant and equipment after years of under-investment, and to undertake improvement projects that will generate operational cost savings and efficiency improvements.

All of the company's European smelters maintained production despite the market disruptions resulting from the global pandemic. The Port Pirie smelter in South Australia raised production to its design rate and is on course to reach availability targets in 2021. However, overall output and financial targets for the year were not achieved owing to production interruptions as a result of equipment failures.

Highlights from the year include:

- A new, streamlined corporate office in Budel, Netherlands, close to one of its major operations with a significant reduction in head office costs;
- Successful completion of integration with Trafigura's commercial teams in purchasing feedstocks and marketing refined metal, leading to better plant utilisation and more consistent performance for customers;
- Significant logistical efficiencies, including a shift from road to rail transport in Belgium and the use of containers to move product between Port Pirie and the company's other Australian smelter in Hobart, Tasmania;
- The development of a number of solar and wind powered renewable energy projects across a number of Nyrstar sites;
- A renewed focus on safety and environmental performance, including reduced emissions and improving water quality. Nyrstar has committed to reducing lead in air from the Port Pirie smelter by 20 percent;
- Development of a culture of teamwork and collaboration, enabling Nyrstar to get the most out of its expert and experienced employees as well as new senior management recruits.

Overall, thanks to strong financial backing from Trafigura, Nyrstar is on a much stronger footing going into 2021, with enhanced confidence in the future and strengthened relations with customers as a result of more consistent delivery performance.

"A key priority under new ownership was to restore stable production."

▼ Nyrstar smelting and refining facility in Port Pirie, Australia.

TFG Marine

TFG Marine is a new joint venture company that Trafigura established in 2020 with two of the world's largest shipowners, Frontline Ltd and Golden Ocean Holdings Ltd, to build a strong position in the global bunker fuel market, through the procurement and supply of marine fuels for its shareholders and affiliated entities as well as third parties.

In its first eight months of operation, the company, 75-percent-owned by Trafigura, grew rapidly, building on its established market position in West and South Africa to add operations in Asia, the Americas and north-west Europe. The latter includes bunkering operations in the English Channel, and in the major Amsterdam-Rotterdam-Antwerp hub.

TFG Marine has also developed its procurement business, purchasing approximately 250,000 metric tonnes of fuel per month in over 250 bunkering ports globally.

Another key highlight of the year was obtaining a bunkering licence in Singapore in May. The city-state accounts for close to 20 percent of the world's bunker market. TFG Marine has already established a strong position and plans to grow volumes significantly during FY 2021.

By the end of September 2020, less than eight months after inception, TFG Marine was operating in 12 physical bunkering locations supplying 540,000 metric tonnes of marine fuel per month, or 6.5 million metric tonnes per year globally, equating to approximately 300 trades per month.

The joint venture was able to add significant volumes by bringing in two further exclusive purchasers of bunker fuel, Norway-based Avance Gas, one of the world's leading VLGC shipowners, and Flex LNG, a carrier based in Bermuda and listed on the Oslo Stock Exchange.

In the new financial year, further bunkering operations are planned in the US Gulf Coast, the Mediterranean, South Africa, the Middle East, China and South Korea. Further growth of the procurement business, both in terms of volumes and extending the customer base, remains a focus over the coming year.

TFG Marine is committed to the transition to lower carbon fuels. From Q1 2021, it is intended that its rapidly expanding business will allow it to offer a range of advanced marine biofuels for sale to customers in the ports of Amsterdam, Rotterdam and Flushing.

▼ TFG Marine bunkering operation at the Port of Singapore.

TFG Marine's global operations

Risk management

How Trafigura manages risk

Trafigura operates in dynamic markets that involve a wide range of risks, whether financial, political, operational, social or environmental. A rigorous and conservative approach to risk management is therefore an integral element and central focus of Trafigura's business.

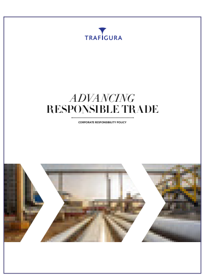
www.trafigura.com/brochure/trafigura-code-of-business-conduct

Trafigura has developed rigorous risk management and governance systems to address the full range of risks to which it is exposed. These systems apply multiple lines of oversight to ensure compliance with all applicable laws and regulations, and a high standard of ethical behaviour by all employees at all times. The Group actively manages and mitigates, wherever possible, the identifiable or foreseeable risks inherent to its activity – for example, systematically hedging exposure to flat prices and extensively using insurance and financial tools such as letters of credit.

The diversification of our business, trading a wide range of commodities with varying and uncorrelated market dynamics across a large number of countries and geographical regions, is an important factor in reducing the Group's overall exposure to any individual market, price, political or other risk. Unlike many financial assets, physical commodity markets provide many opportunities for risk diversification. The premium paid for copper in China, for example, has little to do with the pricing relationship in LPG between the US and Europe.

By extending our trading capabilities, we are diversifying the business, resulting in lower overall exposure and higher risk-adjusted performance.

Compliance and responsible conduct



www.trafigura.com/brochure/trafigura-corporate-responsibility-policy

Trafigura's Code of Business Conduct, Corporate Responsibility Policy and Business Principles set out the high standards of responsible and ethical behaviour required of every employee, individually and collectively. Every employee receives a copy of the Code and applicable key policies, which includes mandatory training as a condition of employment.

In 2020, 556 new-start office-based employees were trained on the Code. Anti-money laundering training, and anti-bribery and corruption training were also delivered, to 1,201 and 1,079 employees respectively*.

*Excluding Nyrstar.

Compliance Committee and Head of Compliance

Trafigura's Chief Compliance Officer oversees the implementation and development of the Group's compliance programme. He reports to the Chief Operating Officer and the Trafigura Compliance Committee. The Compliance Department operates in partnership with the front office to ensure that our controls are relevant and effective. The Department works to continually improve its practices in an environment of evolving technology, regulations and stakeholder expectations. Our compliance training programme continues to expand, ensuring employee awareness of key external and internal requirements.

Further details on our compliance practices can be found in the Responsibility section of our website and in our 2020 Responsibility Report.

Board of Directors and Management Committee

The Management Committee and the Board of Directors directly oversee the trading divisions and operating companies. Trafigura has a flat corporate governance structure featuring short and direct channels of communication and control (see separate section on Governance on page 36).

The Board of Directors has principal oversight responsibility, sets the risk management framework, determines the overall risk appetite of the business, and ensures that the appropriate structures and processes are in place to handle each category of risk in an appropriate manner.

The Management Committee is responsible for the day-to-day management of the Group's operations and investment portfolio and provides direct oversight of the Board's risk management strategy.

Further lines of oversight consist of a series of corporate functions that support the Management Committee in establishing policies and processes for managing different categories of risk, as well as providing analysis, advice and implementation support.

Market and price risks

Market Risk Management Committee and Chief Risk Officer

Trafigura systematically hedges all index price exposure incurred as a result of its trading activities within a framework set by the Board of Directors and implemented by the Market Risk Management Committee and the Chief Risk Officer (CRO).

The CRO reports directly to the Chief Operating Officer and chairs the Market Risk Management Committee, which includes company directors and senior traders. The Committee meets at least weekly to manage overall exposures, assess the impact of changing market dynamics and limit risk exposures and concentrations.

Trafigura's ongoing programme of investment in risk management systems includes a reporting system that automatically notifies the risk management and trading teams whenever a book nears its risk limits.

www.trafigura.com/brochure/trafigura-hsec-business-principles

The CRO works proactively with trading teams to analyse changing market conditions and ensures that hedging strategies are focused on current market dynamics. Rigorous methodologies for managing market risk are used across the company. The CRO's risk team employs advanced statistical models that capture the non-normal dynamics which are an important feature of commodity markets.

The risk team focuses on aggregate risk, paying particular attention to term-structure and intra-commodity spreads. Risk concentrations are continuously reviewed in the context of changing market dynamics. The CRO manages strategic hedging activity dynamically to reduce risk concentrations and limit company-wide exposure.

Finance and credit risks

Finance Committee and Finance Department

The Finance Department supports the activities of the whole Group and is involved at the earliest stage of transactions and projects. Overseen by the Finance Committee, it is responsible for assessment of financial risk and has the capacity to veto any transaction.

Within Finance, the Credit Department's key role is to safeguard the balance sheet. It performs fundamental credit analysis, assessing credit risk associated with the Group's counterparts, setting internal limits, monitoring exposures and overseeing documentation.

Operational and ESG risks

HSEC Steering Committee and Corporate Affairs

The HSEC Steering Committee is co-chaired by a member of the Board of Directors and the Head of Corporate Affairs and comprises senior representatives from across the Group.

It is mandated by the Board to promote best practice, oversee the management of health, safety, environment, and community (HSEC) risks and ensure that Trafigura's Corporate Responsibility Policy and Business Principles are implemented consistently across the organisation.

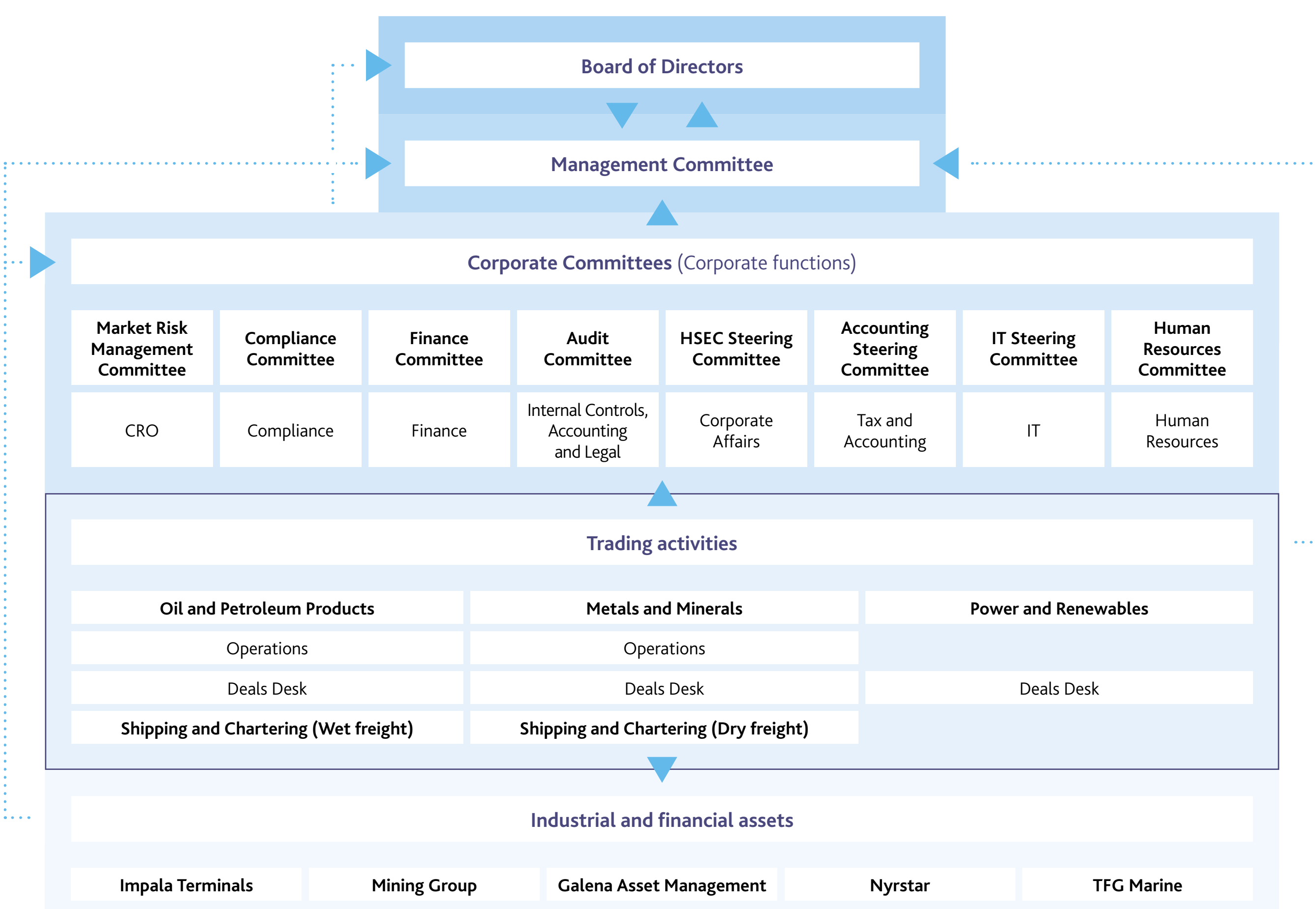
Control risks

Audit Committee and Internal Controls Team

The Internal Controls Department supports management across the Group to continually assess risks and controls for the governance, trading, IT and support processes. Results of these activities are reported to the Audit Committee accompanied by action plans to strengthen controls and further mitigate risks where required. Internal Controls also manages the annual framework cycle activities as part of the process undertaken by external auditors to validate the existence of the Trafigura Internal Control System every year.

Additionally, the team performs site reviews to assess how local management manages risk and to identify opportunities for improvement, and advises on process design for new IT applications.

Overview of Trafigura's risk management system



Risk Management System

KEY RISKS

Markets and prices

Volatility in commodity prices, spreads, interest and exchange rates.

Fluctuations in the supply of, or demand for, commodities that we trade.

Finance, liquidity and credit

Compliance, internal controls and sanctions

Legal, taxation and regulation

Changes in taxation arrangements in various territories.

Collateral effects of changes in financial regulatory frameworks.

MITIGATION AND ACTIONS

Markets and prices

- Trafigura's policy is to hedge all index price exposure related to physical transactions on a deal-by-deal basis.
- All stock is at all times either pre-sold or the index price is hedged.
- Despite such hedging, Trafigura remains exposed to basis risk, i.e., the risk of changes in the difference between the price of the commodity being hedged and the hedging instrument. The Group carefully monitors its hedging positions on a daily basis to avoid excessive basis risk resulting from these imperfect correlations.
- The majority of sales and purchases are denominated in US dollars. Exposure to other currencies is hedged and financing raised in currencies other than US dollars is generally swapped into US dollars.
- Our policy is to borrow short-term working capital at floating rates, with any rate changes passed through to our customers, and to fix rates for medium- and long-term financing via the swaps market.
- Freight costs are hedged by our Shipping and Chartering Desk via Forward Freight Agreements and bunker costs.

Finance, liquidity and credit

- Trafigura relies on a deep pool of financing from banks and investors for working capital to support its business, consisting of three pillars:
(i) Trade finance,
(ii) securitisation and
(iii) unsecured committed revolving credit facilities.
- For longer-term capital needs, we raise funds on public bond markets or through private placements with institutional investors. We follow a strict policy of matching the maturity of our assets and liabilities with longer-term assets supported by longer-term borrowings.
- We take a conservative approach to managing our funding liquidity, with more than one-third of committed facilities unutilised at all times under normal market conditions, and immediately available cash of at least USD500 million always on hand.
- Our transactional financing base allows the underlying assets to be entirely marked-to-market, matching liquidity needs for any related margin calls.

Compliance, internal controls and sanctions

- Trafigura's Compliance Department oversees Group activities in partnership with front office functions to ensure that we operate appropriately and that our controls are relevant and robust. It focuses on promoting a sound compliance culture across the organisation in which everyone recognises their personal responsibility for meeting our compliance objectives. The team adopts a risk-based approach, allocating energy and resources to the issues that matter most to our core business and our stakeholders.
- The Department's activities include counterparty due diligence (KYC); anti-money laundering; sanctions and trade restrictions; anti-bribery and corruption and financial market conduct.
- The Group ensures that all obligations with regard to international sanctions are respected across all our business activities and that we fulfil the undertakings on sanctions that we give as part of our credit facilities. This is a key focus for the trading desks with support from the Compliance Department, as well as Legal and Finance departments.

Legal, taxation and regulation

- Trafigura is focused on managing legal, taxation and regulatory risks across the multiple jurisdictions in which it operates. The Group adheres to all applicable local and international tax laws, including legislation on transfer pricing.
- We continue to follow the ongoing discussions surrounding the Organisation for Economic Co-operation and Development (OECD) Base Erosion and Profit Shifting (BEPS) Pillar One and Pillar Two blueprints. Once a concrete and final direction is determined, we will respond accordingly.
- We are also following closely the discussions about potential new forms of regulation that may be imposed on commodities trading firms. We have made representations to the appropriate authorities about the risks and unnecessary costs of introducing position limits in commodity derivatives markets and of imposing regulatory capital requirements on commodity trading firms.

KEY RISKS

Counterparty, country and credit

Operational and Environmental, Social and Corporate Governance (ESG)

Digital infrastructure/cyber-security

MITIGATION AND ACTIONS

Counterparty, country and credit

- Trafigura uses internal credit limits established by the Credit Department to reduce counterparty and credit risk. The Group prides itself on having had an extremely low incidence of credit losses throughout its history.
- Trafigura reduces political risk in relation to countries below a certain risk rating as gauged by Dun & Bradstreet by purchasing political risk insurance.
- Credit limits reflect Trafigura's own appetite for risk and are based on a credit analysis of the client as well as the size of the relevant transaction when compared to Trafigura's balance sheet.
- In light of lower commodity prices in 2020, we paid particular attention to screening our portfolio of prepayment agreements with producers for credit risk.
- Exposures in excess of a credit limit are covered through the insurance or bank markets.

Operational and Environmental, Social and Corporate Governance (ESG)

- Our Corporate Responsibility Policy and Business Principles articulate the leadership team's priorities and commitments for social and environmental governance. At the operational level, they outline what is expected from everyone in the Group, its divisions and operating companies.
- Each division and operating company is required to supplement the Policy and Principles with relevant, sector-specific standards and procedures to manage the impacts of their operations.
- The HSEC Steering Committee requires all divisions and operating companies to maintain a material risk register describing the key issues they need to manage and mitigate.
- All HSEC incidents are recorded and categorised for severity on Safeguard, the Group's HSEC data management system.
- Incidents registered as levels 3, 4 or 5, involving significant spills or single or multiple fatalities, as well as high-potential near misses are investigated and the results and remedial actions are presented to the HSEC Steering Committee.
- We engage actively with leading industry forums, including the UN Global Compact, the EITI, the World Economic Forum Global Battery Alliance, OECD and Responsible Minerals Initiative.

Digital infrastructure/cyber-security

- Trafigura invests in state-of-the-art systems to protect the integrity of its IT architecture and processes against the threat of fraud or other potential damage from cyber-attack.

Funding model

Finance to meet diverse business needs

Our funding strategy matches sources of funding to financing requirements. We have developed diverse financing strategies that maximise scalability, flexibility and business resilience.

Continued access to capital

Trafigura's activities require substantial amounts of capital.

We source, store, blend and deliver commodities around the globe.

We invest in terminals, logistics and physical infrastructure to improve the efficiency of our trading operations.

Our diversified funding model allows us to continue to operate effectively and successfully in all market conditions. Its scalability and structure protects the business from market shocks and provides flexibility and the ability to capitalise on opportunities as they arise.

We have put in place a global programme of flexible, short-term facilities to finance our day-to-day operations and a programme of longer-term, corporate facilities to finance our asset acquisition and other corporate requirements.

Available funding exceeds our everyday requirements. This provides headroom for unusual market conditions. We also maintain substantial cash balances to ensure that we will always meet day-to-day capital commitments, even in unexpected circumstances.

Our approach to funding

Diversification improves competitiveness and access to capital

We diversify both the sources and the structure of our financing to minimise risk and maximise operational effectiveness.

We raise funds in a variety of markets in the US, Europe and Asia-Pacific. We have lending arrangements in place with 135 banks around the world. We are therefore not constrained by credit restrictions for specific financial institutions, sectors or regions.

We raise capital with a range of repayment schedules, from very short-term facilities to maturities greater than 10 years. This spreads our exposure across the yield curve.

Match-funded, collateralised lending reduces credit risk

As a matter of policy, we match the type of financing to the business requirement. We have established a three-pillar funding structure to put this into practice.

We use short-term financing for trading. These loans are secured against the underlying physical commodities. Lines are marked-to-market each week so the level of financing tracks the value of the underlying collateral as prices change. We raise longer-term debt to finance fixed assets and investments.

Transparency promotes stability

As a private company relying on debt to finance its operations, Trafigura's performance is closely scrutinised by a large group of banks and investors worldwide. We comply with the financial covenants attached to our syndicated bank facilities. Members of the finance team regularly meet with our lenders representatives. These meetings often include operationally focused personnel (from Credit, Compliance and Trading Desks) who provide additional insight into our business model. As an issuer of publicly listed debt, we also meet the transparency requirements of our bond investors. Our interim and full-year reports are published online. We hold regular calls and presentations to update investors and to respond to specific queries directly.

Trafigura funding model

Transactional facilities

Securitisation programme

Corporate Credit facilities

Our three-pillar funding structure

1. Transactional facilities

All transaction-based lending is fully collateralised. We fund day-to-day trading mostly through one-to-one (i.e. bilateral) agreements with individual banks and borrowing bases with syndicates of banks. Most transactions start with a bank issuing a letter of credit ("LC") on behalf of Trafigura in favour of a commodity supplier to secure due payment. The bank takes security over the physical commodity being purchased. When payment is due, Trafigura draws on a transactional loan to pay the supplier, such loan being secured against the commodity. The loan is marked-to-market weekly until maturity so that the amount being financed always corresponds to the value of the underlying commodity.

Once the commodity is sold to the end-buyer, a receivable is created and assigned to the bank until the cash settlement is used to repay the secured loan. Alternatively, the loan can be repaid earlier if the receivable is sold to one of the trade receivables securitisation programmes sponsored by Trafigura.

2. Securitisation programme

Trafigura manages two trade receivables securitisation programmes through separately capitalised special purpose vehicles: TSF and Argonaut. The programmes further diversify Trafigura's funding sources and, thanks to TSF's investment-grade ratings from Moody's and S&P are cost-effective financing mechanisms. Most trades are financed on a trade-by-trade basis with transactional secured loans, but Trafigura can fund an eligible receivable once an invoice has been issued by selling it to a programme. Securitising our receivables accelerates the rotation of existing credit lines, since transactional secured loans can be repaid faster with the programmes' proceeds.

3. Corporate credit facilities

Trafigura invests in fixed assets to support its trading activity. We finance these with long-term debt adhering to our policy of matching assets with liabilities. We issue debt securities and negotiate lending facilities in diverse markets. Funding sources include bonds, perpetual bonds, revolving credit facilities, private placements and term loans.

Public credit ratings

Trafigura does not hold a public rating and does not seek to obtain one. The Group focuses on strengthening its balance sheet through long-term value creation.

We obtain our funding from stakeholders who understand our business model in detail and whose investment decisions are not driven by ratings. We have significantly expanded our sources of financing over the years by maintaining a sustainable credit standing that is consistent with an investment-grade profile.

Likewise, the absence of a rating means that Trafigura's business and investment decisions are not taken on the basis of maintaining a particular rating level, something which becomes particularly important at times of high market volatility.

Trade financing example

to explain funding mechanism

	Purchase and sale agreements	Taking delivery from supplier	Transportation	Pricing and delivery to customer	Customer payment
Transaction component	**Day 1** Purchase and sale agreements	**Day 5** Taking delivery	**Days 6>19** Transportation	**Day 20** Pricing and delivery	**Day 50** Customer payment
Brent crude oil price	$60	$59	$55	$55	$60
Dubai crude oil price	$59	$59	$55	$55	$58
Physical trade	• Trafigura agrees to purchase 1 million barrels @ Brent minus $1/barrel, based on Brent price at delivery date • Trafigura asks a bank to issue an LC for $59 million to the benefit of the supplier, against sight of an acceptable contract, in order to guarantee payment to the supplier, using a **transactional credit facility** • Trafigura agrees to sell 1 million barrels @ Dubai plus $2/barrel, based on Dubai price at delivery • Transaction costs (interest cost, insurance, transport, storage, control, inspection, taxes, etc.) expected at $0.5 million	• Trafigura is invoiced $58 million by the supplier ($59-$1) x 1 million • Trafigura asks bank to pay 95%* of cargo value (95% x $58 = $55 million) to supplier (and cancel letter of credit) against security over title of the cargo, using **transactional credit facility** • Trafigura draws the difference ($58-$55 = $3 million) from the **RCF** * percentage financed, depends on each transaction, usually 90-100%		• Trafigura invoices $57 million to customer ($55+$2) x 1 million • Trafigura sells the receivable (if eligible) to its receivables **securitisation programme** at face value, receiving payment of $57 million • Trafigura repays $55 million of the **transactional credit facility** • Trafigura uses remaining $2 million ($57-$55) to repay the **RCF** and build up **cash** • Trafigura pays $0.5 million transaction costs (interest cost, insurance, transport, storage, control, inspection, taxes, etc.) using **cash**	• **Securitisation programme** receives payment of $57 million from customer and repays funding
Hedging purchase leg	• Trafigura purchases 1 million barrels equiv. of Brent futures @ $60/barrel • Trafigura pays initial margin of $1 million using the **RCF**	• Trafigura sells 1 million barrels equiv. of Brent futures @ $59/barrel, paying net amount of $1 million using the **RCF** ($59-$60) x 1 million • Trafigura recovers $1 million initial margin and repays the **RCF**			
Hedging sale leg	• Trafigura sells 1 million barrels equiv. of Dubai futures @ $59/barrel • Trafigura pays initial margin of $1 million using the **RCF**		• Trafigura receives payment of $4 million (margin call) and repays the **RCF** ($59-$55) x 1 million	• Trafigura purchases 1 million barrels equiv. of Dubai futures @ $55/barrel • No further margin call since price stable • Trafigura recovers $1 million initial margin going to **cash**	

Transactional credit facility utilisation	59	55	55	–	–
Letter of credit utilisation	59	Cancelled	–	–	–
Drawn amount	–	55	55	Repaid	–
RCF utilisation	2	5	1	–	–
Drawn amount	1+1=2	2+3+1-1=5	5-4=1	Repaid	–
Securitisation utilisation	–	–	–	57	–
Drawn amount	–	–	–	57	Repaid
Cash position	–	–	–	1.5	1.5
Outstanding cash	–	–	–	1-0.5+1=1.5	1.5

Corporate governance

Board of Directors and Committees

Trafigura is owned by its management and senior employees. This alignment of employee and shareholder interest promotes sustainable financial performance with management depth and stability.

www.trafigura.com/about-us/leadership

Board of Directors

The principal oversight body for the Group is the Board of Directors, which has overall responsibility for the strategic direction and management of the Group, including commercial and financing strategy and stakeholder relations. Members of the Board of Directors are listed on the opposite page.

The Directors with executive responsibilities are also members of the Management Committee and subsidiary committees as outlined below. Management of the Group is characterised by short reporting lines, flat structures, clear delineation and segregation of responsibilities, and personal accountability.

Employee remuneration is linked to Group performance and individual contribution. The Group's circa 850 senior employees, in their capacity as shareholders, have a personal commitment to its long-term success, promoting management depth and stability and encouraging prudent risk management.

Two sub-committees sit within the Board of Directors: the Audit Committee and the Nomination and Remuneration Committee.

The Audit Committee assists the Board of Directors in fulfilling its oversight responsibilities for the financial reporting process, the system of internal control, the audit process, and the company's process for monitoring compliance with laws and regulations and the Code of Business Conduct.

The Nomination and Remuneration Committee assists and advises the Board of Directors on matters relating to the appointment and remuneration of the Executive Directors, the Management Committee and other senior employees of the Trafigura Group.

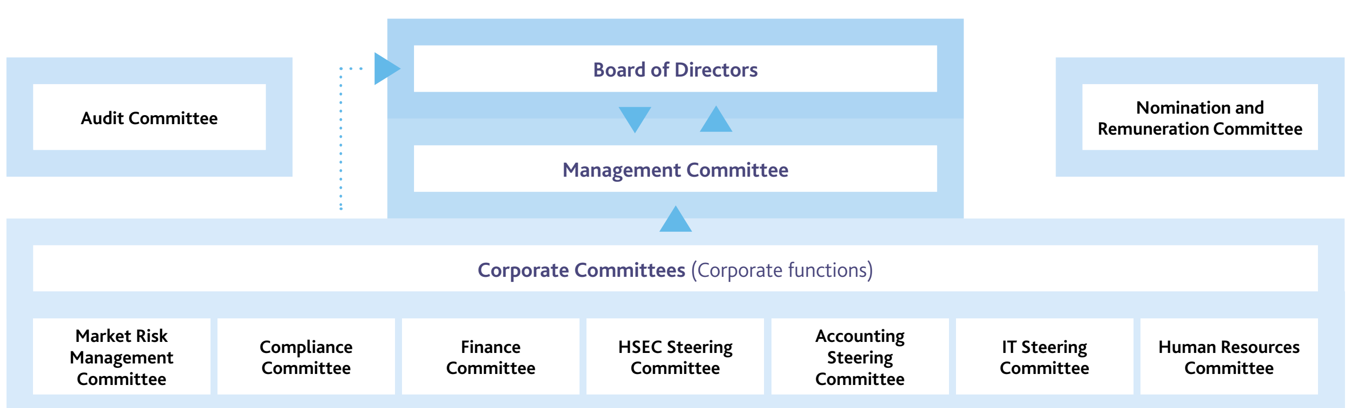
Management Committee

The nine-strong Management Committee sits below the Board of Directors and includes Trafigura's three Executive Directors. The Management Committee is responsible for the execution of Trafigura's business strategy, including management of the day-to-day trading, commercial and operational functions as well as its investment portfolio.

The Management Committee is supported by the following corporate functions and committees:

- Finance Committee
- Audit Committee
- Nomination and Remuneration Committee
- Accounting Steering Committee
- IT Steering Committee
- Market Risk Management Committee
- Compliance Committee
- HSEC Steering Committee
- Human Resources Committee

Corporate governance overview



Leadership

Board of Directors

Pierre Lorinet
Director

Pierre Lorinet is the former Group Chief Financial Officer and Managing Director of the Asia-Pacific region. In 2015, he became a Non-Executive Director on the Board.

Andrew Vickerman
Director

Andrew Vickerman has held a Non-Executive Board position with Trafigura since October 2010 and chairs the Nomination and Remuneration Committee and co-chairs the HSEC Steering Committee.

Sipko Schat
Director

Sipko Schat joined the Board of Directors in January 2016 and chairs the Audit Committee. Prior to joining Trafigura, Sipko worked in the Rabobank Group for over 25 years.

Mark Irwin
Director

Mark Irwin, a UK Chartered Accountant, joined Trafigura as financial controller in 1994 and has been on the Board since 2004.

Management Committee

Jeremy Weir
Executive Chairman and Chief Executive Officer

Jeremy Weir was appointed CEO of Trafigura in March 2014 and Executive Chairman in March 2018, after a career spanning nearly three decades in commodity and commodity derivative markets. Jeremy joined the Trafigura Group in 2001 as Head of Metals Derivatives, Structured Products and Risk Management.

Mike Wainwright
Executive Director and Chief Operating Officer

Mike Wainwright was appointed Chief Operating Officer and Trafigura Management Board member in January 2008. His principal focus is the management of the middle and back office support teams for the trading division, including IT strategy and infrastructure. He also has direct responsibility for the Group's profit and loss.

Jose Maria Larocca
Executive Director and Co-Head of Oil Trading

Jose Maria Larocca was appointed to the Trafigura Management Board and Head of the Oil and Petroleum Products Trading division in March 2007. He was one of the company's earliest employees, joining Trafigura in London in 1994 on the Oil Deals Desk before taking a series of commercial roles, including as a trader of naphtha and gasoline.

Christophe Salmon
Group Chief Financial Officer

Ben Luckock
Co-Head of Oil Trading

Hadi Hallouche
Co-Head of Oil Trading

Amin Zahir
Head of Metals and Minerals Trading

Julien Rolland
Head of Bulk Minerals, and Power and Renewables Trading

Jesus Fernandez
Head of Mergers and Acquisitions

Financial statements

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Report of the auditor
to the Shareholders and the Board of Directors
of Trafigura Group Pte. Ltd. Singapore

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Trafigura Group Pte. Ltd. and its subsidiaries (collectively, the "Group"), which comprise the consolidated statement of income and consolidated statement of other comprehensive income for the year ended 30 September 2020, the consolidated statement of financial position as at 30 September 2020, the consolidated statement of changes in equity and consolidated statement of cash flows for year then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 30 September 2020 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report.

We are independent of the Group in accordance with the provisions of the International Code of Ethics for Professional Accountants (including International Independence Standards) of the International Ethics Standards Board for Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall Group materiality: USD 62'000'000

We performed full scope audit work at 6 components, audited specific balances at 44 components and performed specified procedures at 6 components. Our audit scope addressed approximately 78% of the Group's revenue and 79% of the Group's total assets.

As key audit matters the following areas of focus have been identified:

- Valuation of FPOR11 instruments linked to equity accounted investment in Porto Sudeste in Brazil
- Impairment testing of the equity accounted investment in Puma Energy Holdings Pte. Ltd.
- Impairment testing of the logistics network assets in Colombia

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Context of our audit

Trafigura Group Pte. Ltd. is one of the world's largest independent commodity trading and logistics companies. The Group trades operationally across different geographical locations around the world within two primary segments, Oil and Petroleum Products and Metals and Minerals, both of which are supported by the related shipping and chartering activities. The Metals and Minerals segment also encompasses mining, logistics and smelting businesses. The Group also invests in terminals, storage warehouses, mines and other commodity-related assets, either directly or through equity stakes in joint ventures and associate companies over which they may have significant influence.

The Group's business is focused on commodity trade flows, including the transporting, storing and blending of a diverse portfolio of commodities to exploit natural arbitrage opportunities. To ensure the accurate capture of all the transactions for financial reporting, the Group relies on complex front-office trade and risk management systems with varying levels of integration, supported by manual reconciliations. The high volume of transactions and complexity of the systems heightens the risk of inaccurate or incomplete recording of transactions within the system. Minor errors, which repeat, could have a material impact on the consolidated financial statements.

As a part of designing our audit, we determined materiality and assessed the risks of material misstatement in the consolidated financial statements. In particular, we considered where management made subjective judgements, especially in respect of significant accounting estimates that involved making assumptions and considering the impact of future events that are inherently uncertain. In Note 3.26 *Use of estimates and judgements of the financial statements*, the Group describes the areas of key judgements made in applying accounting policies and the key sources of estimation uncertainty. Given the significant estimation uncertainty and the higher inherent risks of material misstatement, certain of these areas were also considered by us to be key audit matters and are described in more detail in the section 'Key audit matters' of this report. We also addressed risk of management override of controls, including among other matters, consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud. Furthermore, we evaluated and tested the design and operating effectiveness of the Group's controls over the accounting and financial reporting aspects within its trading operations, including the use of data analytics to assist in the testing of revenue (trade to cash) to identify nonstandard and more risky transactions.

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall Group materiality	USD 62'000'000
How we determined it	5% of the three-year average profit before tax
Rationale for the materiality benchmark applied	In our view, the materiality benchmark applied above is the measure against which the performance of the Group is most commonly assessed and is a generally accepted benchmark. We used a three-year average to allow for the volatility in earnings normally encountered in the commodity trading markets.

We agreed with the Audit Committee that we would report to them misstatements above USD 3'100'000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

The Group financial statements are a consolidation of 422 legal entities that are accounted for in 648 financial ledgers, which we have defined as "components" for audit scoping purposes.

We identified 6 components that, in our view, required an audit of their financial information due to their size or risk characteristics. For these 6 components, the audit work was performed either centrally by the Group audit team in Switzerland or the Netherlands or by another PwC network firm at one of the Group's global service centres located in Mumbai, India or Montevideo, Uruguay under the direct guidance of the Group audit team. Additionally, we identified 50 components, that in our view, required either an audit of specific balances or specified procedures to be performed due to the significant or higher risk areas and to achieve appropriate coverage over material amounts.

Of the 50 components, there were only 6 components where the work was not performed directly by ourselves or through our direct supervision at the Group's global services centres. Of these 6 components, we specified procedures in instructions for 4 components to a non-PwC network audit firm to report to us, and we reviewed the results of their work with them for our audit. We determined the level of our involvement in the audit work performed by the component auditors for these 6 components to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the consolidated financial statements as a whole.

We ensured that the audit teams both at Group and at the component levels included the appropriate skills and competencies necessary for the audit of the Group's consolidated financial statements, including specialists in the areas of information technology, valuation and taxes. The Group audit team was in regular communication during the year with the local teams to discuss the audit approach, progress of the audit and observations or findings, if any. To facilitate our direct review, local PwC teams in India and Uruguay documented their audit work directly in the Group audit team's files. The Group audit team also performed further audit procedures over Group functions (including those relating to taxation, equity-based remuneration, valuation of certain non-current assets, litigation, consolidation and financial reporting disclosures). We also performed procedures focused on responding to the risk of fraud and non-compliance with laws and regulations.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of FPOR11 instruments linked to equity accounted investment in Porto Sudeste, Brazil

Refer to "Use of estimates and judgements" in Note 3.26, Note 12 and Note 20

Key audit matter	How our audit addressed the key audit matter
The Group holds a 49.63% interest in a joint venture that owns and operates an iron ore port facility in Brazil (Porto Sudeste). Linked to this investment, the Group holds listed debt securities (FPOR11) totalling USD 221 million which are accounted for at fair value through profit and loss. The performance and resulting value of these debt instruments is dependent on the future throughput results of the port. As there is limited liquidity of these debt securities, the fair value is based on a Level 3 valuation using the key assumptions of the port's business plan. A further discount of 33% to the net present value of the relevant cash flows is also applied due to lack of marketability, which was increased from the 10% discount in prior year. During the year, the Group recorded a fair value loss of USD 125 million on the FPOR11 instruments as disclosed in Note 12. The reduction in the value was primarily driven by an increase in discount factor from 10% as at 30 September 2019 to 33% as at 30 September 2020, reflecting the longer time expected to market such instruments in the current market conditions. Furthermore, the level 3 valuation was revised to reflect lower and more conservative throughput volumes and price projections due to tight iron ore supply conditions in Brazil and uncertain business environment that has been intensified by the COVID-19 pandemic. The revised cash flow projections have also triggered the need to perform an impairment assessment for the Group's equity investment in Porto Sudeste. Based on the assessment performed, management determined no impairment is required of the carrying value of the investment totalling USD 82 million. The estimates and judgments used in determining the fair value of the debt instruments and related impairment assessments are significant and are considered a key audit matter.	We obtained the valuation models (both at port level and equity investment level) and met with management to gain an overview of the market and operational factors and key assumptions supporting the Group's FPOR11 valuation and related impairment assessment. With the assistance of our internal valuation specialists, we performed the following procedures: • Gained an understanding of the process for collecting the inputs into the valuation models and checked the appropriateness of the inputs and significant assumptions, including the throughput volumes, discount rate, iron ore prices, port fees and the marketability discount. • Re-performed the valuation calculations; benchmarked the valuation model with generally accepted valuation techniques; compared historical estimates used by management to actual results. • Re-performed certain calculations supporting the sensitivity analysis prepared by management for the forecasted assumptions over the volumes, discount rate and marketability discount; we performed our own independent calculations where applicable. • Assessed the appropriateness of disclosures included in the financial statements, including key assumptions used and inherent sensitivities of the financial results to these assumptions. The procedures performed over the port valuation were used to determine the appropriateness of the fair value calculation of FPOR11 instruments. Based on the work performed, we were able to conclude that the significant judgements and estimates used in the valuation models were reasonable and appropriate.

Impairment testing of the equity accounted investment in Puma Energy Holdings Pte. Ltd.

Refer to "Use of estimates and judgements" in Note 3.26, Note 11 and Note 17

Key audit matter	How our audit addressed the key audit matter
The Group holds a 55.55% interest in Puma Energy Holdings Pte. Ltd. (Puma), which is valued at USD 1,122 million at 30 September 2020. In 2020, the financial performance of Puma continued to be negatively affected by ongoing uncertainty and various restrictions across its key markets, particularly aviation, that have been imposed by the COVID-19 pandemic. This triggered a need for an impairment test which resulted in the Group recognising a USD 191 million impairment loss in the consolidated statement of income in addition to the USD 326 million loss recorded in the consolidated statement of income and the USD 83 million in consolidated statement of other comprehensive income for Group's share of Puma's losses in accordance with IAS 28 *Investments in Associates and Joint Ventures*. The significance of the estimates and judgments used in making this impairment assessment are considered a key audit matter.	We obtained the valuation models and met with management to gain an overview of the market, operational factors and key assumptions supporting the Group's impairment assessment. We issued instructions to the non-PwC network audit firm to report to us on financial information supporting the Group's recording of its share of Puma's losses and the forecasted cash flows used in the impairment valuation model. We performed a detailed review of the work performed by the non-PwC network audit firm. With the assistance of our internal valuation specialists, we performed the following procedures: • Checked the appropriateness of the inputs and significant assumptions including the discount rate, terminal growth rate, terminal value calculations and market multiples. • Re-performed certain valuation calculations, benchmarked the valuation model with generally accepted valuation techniques and compared current year budget estimates used by management to actual results. • Performed an independent sensitivity analysis calculation for the terminal growth rate, discount rate and market multiples to assess their relationships and impact on the model. • Assessed the appropriateness of disclosures included in the financial statements. Based on the work performed, we were able to conclude that the significant judgements and estimates used in the valuation model were reasonable and appropriate.

Impairment testing of the logistics network assets in Colombia

Refer to "Use of estimates and judgements" in Note 3.26 and Note 11

Key audit matter	How our audit addressed the key audit matter
The Group has constructed a river port to transport wet and dry bulk cargoes along the Magdalena River, one of Colombia's main waterways. The carrying value of the total multimodal project, which represents one cash-generating unit, was USD 491 million at 30 September 2020. The potential profitability is hindered by the Colombian government's delays of its planned dredging of the Magdalena River. The depth of the Magdalena River determines the ease of navigability and how much each barge convoy can load. The dredging project continues to be delayed until a new contractor is mandated to complete the project. This delay, in combination with adverse market conditions seen with the COVID-19 pandemic, triggered a need for an impairment test which resulted in USD 392 million impairment loss being recognised. In making this impairment assessment, management assumed that the river improvement project will be completed by 2026. The significance of this and other estimates and judgments used in making this impairment assessment are considered a key audit matter.	We obtained the valuation models and met with management to gain an overview of the market, operational factors being impacted by the delays in dredging and the key assumptions supporting the Group's impairment assessment. With the assistance of our internal valuation specialists, we performed the following procedures: • Checked the appropriateness of the inputs and significant assumptions including the cash flow projections and their length, tariffs, costs and expenses, discount rate as well as the impact of the expected timing for finalisation of the river improvement project. • Re-performed certain valuation calculations, benchmarked the valuation model with generally accepted valuation techniques, and compared current year budget estimates used by management to actual results. • Performed an independent sensitivity analysis calculation for timing of the completion of the dredging project, projected cash flows and discount rate to assess their relationships and impact on the model. • Assessed the appropriateness of disclosures included in the financial statements. Based on the work performed, we were able to conclude that the significant judgements and estimates used in the valuation model were reasonable and appropriate.

Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report but does not include the consolidated financial statements of Trafigura Group Pte. Ltd. and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS as issued by the IASB, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers SA

/s/ TRAVIS RANDOLPH	/s/ EWA ANSELM-JEDLINSKA
Travis Randolph	Ewa Anselm-Jedlinska

Geneva, Switzerland

7 December 2020

Enclosure:

- Consolidated financial statements (consolidated statement of income, consolidated statement of other comprehensive income, consolidated statement of financial position, consolidated statement of changes in equity, consolidated statement of cash flows and notes)

A. Consolidated statement of income

	Note	2020 USD'M	2019 USD'M
Revenue	8	**146,994.3**	171,474.1
Cost of sales*		**(140,199.8)**	(168,604.3)
Gross profit**	5	**6,794.5**	2,869.8
General and administrative expenses *	9/10	**(2,155.1)**	(1,049.1)
Impairments of PP&E and intangible fixed assets*	11	**(648.6)**	(49.0)
Impairments of financial assets and prepayments	11	**(395.1)**	(20.6)
Impairments of equity-accounted investees	11	**(524.2)**	(34.6)
Other income/(expenses) – net*	12	**(196.2)**	(68.0)
Results from operating activities		**2,875.3**	1,648.5
Finance income*		**500.1**	700.4
Finance expense*		**(1,158.1)**	(1,404.5)
Net financing costs		**(658.0)**	(704.1)
Share of profit/(loss) of equity-accounted investees	17	**(327.0)**	47.7
Profit before tax		**1,890.3**	992.1
Income tax expense*	13	**(291.5)**	(124.3)
Profit for the period		**1,598.8**	867.8
Profit attributable to			
Owners of the Company*		**1,699.2**	871.7
Non-controlling interests	28	**(100.4)**	(3.9)
Profit for the period		**1,598.8**	867.8

* These line items are impacted due to the initial application of IFRS16 for which comparison figures are not restated. Refer to Note 4.1 for the impact of IFRS16.

** Gross profit for 2019 has been adjusted due to changes in expenses reclassification and presentation.

See accompanying Notes.

B. Consolidated statement of other comprehensive income

	Note	2020 USD'M	2019 USD'M
Profit for the period		**1,598.8**	867.8
Other comprehensive income			
Items that are or may be reclassified to profit or loss:			
Gain/(loss) on cash flow hedges	27	**46.7**	(101.8)
Effect from hyperinflation adjustment	38	**12.8**	–
Tax on other comprehensive income	13	**18.3**	10.7
Exchange gain/(loss) on translation of foreign operations*		**37.8**	(63.1)
Share of comprehensive income/(loss) from associates		**(146.4)**	24.4
Items that will not be reclassified to profit or loss:			
Net change in fair value through other comprehensive income, net of tax	20	**(34.3)**	(6.9)
Defined benefit plan actuarial gains/ (losses), net of tax		**12.1**	(1.5)
Other comprehensive income for the period, net of tax		**(53.0)**	(138.2)
Total comprehensive income for the period		**1,545.8**	729.6
Total comprehensive income attributable to:			
Owners of the Company*		**1,646.2**	733.5
Non-controlling interests		**(100.4)**	(3.9)
Total comprehensive income for the period		**1,545.8**	729.6

* These line items are impacted due to the initial application of IFRS16 for which comparison figures are not restated. Refer to Note 4.1 for the impact of IFRS16.

See accompanying Notes.

C. Consolidated statement of financial position

	Note	30 September 2020 USD'M	30 September 2019 USD'M
Assets			
Property, plant and equipment	14	**3,430.2**	3,874.1
Intangible assets	15	**210.3**	212.0
Right-of-use assets*	16	**2,091.5**	–
Lease receivables*	16	**124.1**	–
Equity-accounted investees	17	**2,438.6**	3,416.5
Prepayments	18	**1,061.0**	678.8
Loans receivable	19	**694.4**	521.4
Other investments	20	**517.1**	1,003.7
Derivatives	35	**232.7**	393.2
Deferred tax assets*	13	**124.3**	321.1
Other non-current assets	21	**192.0**	356.3
Total non-current assets		**11,116.2**	10,777.1
Inventories	22	**20,177.6**	13,435.0
Trade and other receivables	23	**15,245.1**	18,516.5
Lease receivables*	16	**37.4**	–
Derivatives	35	**866.4**	962.8
Prepayments	18	**2,934.5**	3,454.4
Income tax receivable	13	**31.6**	43.3
Other current assets	25	**351.2**	318.7
Deposits	26	**466.0**	374.2
Cash and cash equivalents	26	**5,757.0**	6,267.2
Total current assets		**45,866.8**	43,372.1
Non-current assets classified as held for sale		**2.6**	2.2
Total assets		**56,985.6**	54,151.4
Equity			
Share capital	27	**1,503.7**	1,503.7
Capital securities	27	**1,097.7**	1,073.8
Reserves	27	**(965.4)**	(900.3)
Retained earnings*	27	**5,923.3**	4,799.8
Equity attributable to the owners of the Company		**7,559.3**	6,477.0
Non-controlling interests	28	**230.6**	327.7
Total group equity		**7,789.9**	6,804.7
Liabilities			
Loans and borrowings	29	**7,070.1**	8,492.1
Derivatives	35	**190.8**	373.6
Long-term lease liabilities*	16	**1,407.4**	–
Provisions	30	**371.5**	343.9
Other non-current liabilities	31	**722.0**	372.4
Deferred tax liabilities	13	**209.7**	386.2
Total non-current liabilities		**9,971.5**	**9,968.2**
Current tax liabilities	13	**249.1**	155.8
Loans and borrowings	29	**25,783.5**	22,455.5
Short-term lease liabilities*	16	**981.6**	–
Trade and other payables	32	**11,081.0**	13,935.2
Other current liabilities	33	**488.9**	86.0
Derivatives	35	**640.1**	746.0
Total current liabilities		**39,224.2**	37,378.5
Total group equity and liabilities		**56,985.6**	54,151.4

* These line items are impacted due to the initial application of IFRS16 for which comparison figures are not restated. Refer to Note 4.1 for the impact of IFRS16.

See accompanying Notes.

D. Consolidated statement of changes in equity

USD'000	Note	Share capital	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital securities	Retained earnings	Profit for the year	Total	Non-controlling interests	Total Group equity
		Equity attributable to the owners of the Company									
Balance at 1 October 2019		1,503,722	(770,723)	(29,018)	(100,566)	1,073,792	3,928,066	871,731	6,477,004	327,684	6,804,688
Profit for the period		–	–	–	–	–	–	1,699,139	1,699,139	(100,368)	1,598,771
Other comprehensive income		–	(51,917)	(34,311)	21,124	–	12,143	–	(52,961)	–	(52,961)
Total comprehensive income for the period		**–**	**(51,917)**	**(34,311)**	**21,124**	**–**	**12,143**	**1,699,139**	**1,646,178**	**(100,368)**	**1,545,810**
Profit appropriation		–	–	–	–	–	871,731	(871,731)	–	–	–
Shares issued		–	–	–	–	–	–	–	–	188	188
Dividend	26	–	–	–	–	–	(585,987)	–	(585,987)	–	(585,987)
Acquisition of non-controlling interest in subsidiary		–	–	–	–	–	(8,027)	–	(8,027)	(607)	(8,634)
Share-based payments	35	–	–	–	–	–	130,291	–	130,291	–	130,291
Capital securities (currency translation)	26	–	–	–	–	20,273	(20,273)	–	–	–	–
Capital securities dividend	26	–	–	–	–	–	(80,687)	–	(80,687)	–	(80,687)
Share of other changes in equity of associates		–	–	–	–	–	312	–	312	–	312
Capital contribution from the minority shareholders		–	–	–	–	–	–	–	–	3,745	3,745
Other		–	–	–	–	3,627	(23,367)	–	(19,740)	–	(19,740)
Balance at 30 September 2020		**1,503,722**	**(822,640)**	**(63,329)**	**(79,442)**	**1,097,692**	**4,224,202**	**1,699,139**	**7,559,344**	**230,642**	**7,789,986**

USD'000	Note	Share capital	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital Securities	Retained earnings	Profit for the year	Total	Non-controlling interests	Total Group equity
		Equity attributable to the owners of the Company									
Balance at 1 October 2018		1,503,722	(694,794)	(22,432)	(48,080)	953,555	3,380,170	849,217	5,921,358	328,698	6,250,056
Profit for the period		–	–	–	–	–	–	871,731	871,731	(3,934)	867,797
Other comprehensive income		–	(75,929)	(6,890)	(52,486)	–	(2,936)	–	(138,241)	4	(138,237)
Total comprehensive income for the period		**–**	**(75,929)**	**(6,890)**	**(52,486)**	**–**	**(2,936)**	**871,731**	**733,490**	**(3,930)**	**729,560**
Profit appropriation		–	–	–	–	–	849,217	(849,217)	–	–	–
Dividend	26	–	–	–	–	–	(336,721)	–	(336,721)	(6,767)	(343,488)
Recycling revaluation reserve to retained earnings FVOCI instruments	19	–	–	304	–	–	(304)	–	–	–	–
Share–based payments	35	–	–	–	–	–	108,252	–	108,252	–	108,252
Capital securities issued	26	–	–	–	–	270,363	–	–	270,363	–	270,363
Repayment of capital securities	26	–	–	–	–	(147,995)	–	–	(147,995)	–	(147,995)
Capital securities (currency translation)	26	–	–	–	–	(2,639)	2,639	–	–	–	–
Capital securities dividend	26	–	–	–	–	–	(63,301)	–	(63,301)	–	(63,301)
Divestment of subsidiary		–	–	–	–	–	1,198	–	1,198	34	1,232
Share of other changes in equity of associates		–	–	–	–	–	(10,148)	–	(10,148)	–	(10,148)
Capital contribution from the minority shareholders		–	–	–	–	–	–	–	–	9,649	9,649
Other		–	–	–	–	508	–	–	508	–	508
Balance at 30 September 2019		**1,503,722**	**(770,723)**	**(29,018)**	**(100,566)**	**1,073,792**	**3,928,066**	**871,731**	**6,477,004**	**327,684**	**6,804,688**

See accompanying Notes.

E. Consolidated statement of cash flows

	Note	2020 USD'M	2019 USD'M
Cash flows from operating activities			
Profit before tax*		**1,890.3**	992.1
Adjustments for:			
Depreciation*	10	**1,319.2**	149.6
Amortisation of intangible assets	10	**50.1**	51.2
Provisions	30	**53.6**	(22.6)
(Gain)/loss on fair value through profit and loss instruments	12	**128.1**	114.0
Impairment losses on financial assets and prepayments	11	**395.1**	20.6
Impairment losses on non-financial fixed assets	11	**648.6**	49.0
Impairment losses on equity-accounted investees	11	**524.2**	34.6
Net finance costs*		**658.0**	704.1
Share of (profit)/loss of equity-accounted investees	17	**327.0**	(47.7)
(Gain)/loss on sale of non-financial fixed assets*	12	**(5.7)**	4.2
(Gain)/loss on sale of equity accounted investees	12	**(1.7)**	36.0
(Gain)/loss on sale of other investments	12	**–**	(1.8)
(Gain)/loss on divestments of subsidiaries	12	**0.8**	(198.5)
Revaluation gain	12	**–**	(0.2)
Equity-settled share-based payment transactions	35	**130.3**	108.3
Operating cashflow before working capital changes		**6,118.1**	1,992.9
Changes in:			
Inventories		**(6,744.1)**	2,090.5
Trade and other receivables and derivatives		**3,546.4**	1,989.5
Prepayments		**179.7**	(958.2)
Trade and other payables and derivatives		**(2,876.3)**	31.0
Cash generated from/(used in) operating activities		**223.7**	5,145.7
Interest paid*		**(1,154.1)**	(1,397.2)
Interest received*		**475.2**	704.8
Dividends (paid)/received		**4.9**	–
Tax (paid)/received		**(207.8)**	(183.1)
Net cash from/(used in) operating activities		**(658.1)**	4,270.2
Cash flows from investing activities			
Acquisition of property, plant and equipment	14	**(427.8)**	(224.4)
Proceeds from sale of property, plant and equipment	14	**95.1**	14.7
Acquisition of intangible assets	15	**(60.2)**	(44.2)
Proceeds from sale of intangible assets		**0.1**	–
Acquisition of equity accounted investees	17	**(72.3)**	(85.6)
Disposal of equity accounted investees		**28.8**	1.1
Proceeds from loans receivable and advances	18/19	**(132.1)**	(250.9)
Repayment of loans receivable and advances	18/19	**2.1**	3.7
Acquisition of other investments	20	**(71.2)**	(168.9)
Disposal of other investments	20	**373.8**	39.1
Acquisition of subsidiaries, net of cash acquired	6	**–**	183.4
Disposal of subsidiaries, net of cash disposed of	7	**(0.8)**	246.9
Net cash from/(used in) investing activities		**(264.5)**	(285.1)
Cash flows from financing activities			
Proceeds from the issue of capital securities	27	**0.5**	–
Payment of capital securities dividend	27	**(73.2)**	(60.9)
Dividend and payments in relation to the share redemption by the direct parent company	27	**(586.0)**	(336.7)
Repayment of capital securities	27	**–**	(148.0)
Proceeds from capital contributions to subsidiaries by non-controlling interests	28	**3.7**	10.8
Acquisition of non-controlling interest		**(8.6)**	–
Dividend non-controlling interest		**–**	(5.4)
Increase in long-term loans and borrowings	29	**1,699.9**	1,213.9
(Decrease) in long-term loans and borrowings	29	**(1,906.6)**	(327.4)
Payment of lease liabilities (instalment)*	16/29	**(999.0)**	(12.3)
Net increase/(decrease) in short-term bank financing	29	**2,281.7**	(3,407.7)
Net cash from/(used in) financing activities		**412.5**	(3,073.7)
Net increase/(decrease) in cash and cash equivalents		**(510.2)**	911.4
Cash and cash equivalents at 1 October		**6,267.2**	5,355.8
Cash and cash equivalents at 30 September	26	**5,757.0**	6,267.2

* These line items are impacted due to the initial application of IFRS16 for which comparison figures are not restated. Refer to Note 4.1 for the impact of IFRS16.

See accompanying Notes.

F. Notes to consolidated financial statements

1. Corporate information

The principal business activities of Trafigura Group Pte. Ltd. (the 'Company') and together with its subsidiaries (the 'Group') are trading in crude and petroleum products, non-ferrous concentrates, refined metals and bulk commodities such as coal and iron ore. The Group also invests in assets, including through investments in associates, which have strong synergies with its core trading activities. These include storage terminals, service stations, metal warehouses, industrial facilities and mines.

The Company is incorporated in Singapore and its principal business office is at 10 Collyer Quay, Ocean Financial Centre, #29-00, Singapore, 049315.

The Company's immediate holding company is Trafigura Beheer B.V., a company incorporated in the Netherlands. Trafigura Beheer B.V. is ultimately controlled by Farringford Foundation, which is established under the laws of Panama.

The consolidated financial statements for the year ended 30 September 2020 were authorised for issue by the Board of Directors on 7 December 2020.

2. Basis of preparation

The Company's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The consolidated financial statements have been prepared under the historical cost convention except for inventories, derivatives and certain other financial instruments that have been measured at fair value. The consolidated financial statements have been prepared on a going concern basis.

2.1 Functional and presentation currency

The Group's presentation currency is the US dollar (USD) and all values are rounded to the nearest tenth of a million (USD'M 0.1) except when otherwise indicated. The US dollar is the functional currency of most of the Group's principal operating subsidiaries. Most of the markets in which the Group is involved are USD denominated.

3. Significant accounting policies

The consolidated financial statements have been prepared in compliance with IFRS. The accounting policies are consistent with those from previous financial years except for the adoption of IFRS 16 Leases as from 1 October 2019, and the expense classification and presentation including comparative numbers in the statement of income.

3.1 Going concern

Following the outbreak of the COVID-19 pandemic, the Group has seen increased uncertainties and further market volatility. It is still difficult to say how effective governmental measures will be in preventing the further spread of the virus. Volatile market conditions in the financial year 2020 had a positive effect on the Group's trading results which were at the same time offset with impairments on the industrial assets due to COVID-19 and the consequent economic downturn. In the event of a prolonged pandemic, there may be an additional effect on the financial performance of the Group. The Group has taken measures to ensure that its employees and partners continue to be safe while interacting together. Measures have been taken to minimise the impact of the pandemic and to continue operations in the Group's businesses. Business continues to function well and largely uninterrupted. Parts of it are already returning to some kind of normality. The Group continues to provide access to vital materials for modern life. The Group is showing that this can be done responsibly and efficiently in challenging circumstances.

The Group has sufficient cash and headroom in its credit facilities. Given the evolving nature of COVID-19, uncertainties will remain and the Group is unable to reasonably estimate the future impact. However, the financial situation of the Group is currently healthy, and it does not believe that the impact of the COVID-19 virus will have a material adverse effect on its financial condition or liquidity. Therefore, based on the Group's current cash balance and expected yearly cash outflow, the Group expects that it will be able to meet its financial obligations and therefore continues to adopt a going concern assumption as the basis for preparing its annual consolidated financial statements.

3.2 Basis of consolidation

The consolidated financial statements include the assets, liabilities and results of operations of all subsidiaries and branch offices, which the Company, either directly or indirectly, controls. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee.

Subsidiaries are consolidated from the date on which control is obtained by the Company and cease to be consolidated from the date on which control is transferred to a person or entity outside of the control of the Company. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in the Company's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions with any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received being recognised directly in equity and attributed to equity holders of the Company.

If the Group loses control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. The parent's share of components previously recognised in other comprehensive income (OCI) is reclassified to profit and loss or retained earnings, as would be required if the Group had directly disposed of the related assets or liabilities. Any surplus or deficit arising on the loss of control is recognised in the statement of income. If the Group retains any interest in the previous subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently it is accounted for as an equity-accounted investee or as an equity investment depending on the level of influence retained.

Non-controlling interests in subsidiaries are identified separately from the Company's equity and are initially measured either at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

3.3 Investments in equity-accounted investees

Associates and joint ventures (together Associates) in which the Group exercises significant influence or joint control are accounted for using the equity method. Significant influence is the power to participate in the financial and operating policy decisions of the investee but not control these policies. Joint control is established by contractual agreement and requires unanimous consent for strategic financial and operating decisions. The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

Under the equity method, the investment in an Associate is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share in the net assets of the Associate since acquisition date. Goodwill relating to the Associate is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment. The statement of income reflects the Group's share of the results of operations of the Associate. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the Associate, the Group recognises its share of any changes, when applicable, in the statement of changes in equity.

Unrealised gains and losses resulting from transactions between the Group and the Associate are eliminated to the extent of the interest in the Associate, unless the sale or contribution of assets constitute a business in which case the gains and losses are recognised in full. The aggregate of the Group's share of profit or loss of equity-accounted investees is shown on the face of the statement of income and represents profit or loss after tax and non-controlling interests in the subsidiaries of the Associate.

The Group determines at each reporting date whether there is any objective evidence that the investment in the Associate is impaired. The financial statements of the Associates are prepared for the same reporting period as the Group, unless otherwise indicated.

Changes in the Group's interest in Associates are accounted for as a gain or loss on disposal with any differences between the amount by which the carrying amount of the Associate is adjusted and the fair value of the consideration received being recognised directly in the statement of income.

3.4 Business combinations

The Company accounts for its business combinations under the acquisition method at the acquisition date, which is the date on which control is transferred to the Group. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. Transaction costs, other than those associated with the issue of debt or equity securities, that the Group incurs in connection with a business combination are expensed as incurred.

If a business combination is achieved in stages, any previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in the statement of income except when measured at fair value through OCI. The remeasured stake is then considered in the determination of goodwill.

If the consideration transferred for a business combination exceeds the fair values attributable to the Group's share of the identifiable net assets, the difference is treated as goodwill, which is not amortised but is reviewed annually for impairment or when there is an indication of impairment. If a business combination results in negative goodwill, the Group reassesses whether it has correctly identified and measured all assets acquired and all liabilities assumed. If the negative goodwill remains after the reassessment, it is recognised as a gain in the statement of income.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognised in the statement of income.

3.5 Fair value measurement

The Group measures financial instruments, such as derivatives and certain non-derivative financial assets, at fair value at each balance sheet date. Also, fair values of financial instruments measured at amortised cost are disclosed in Note 35.10.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities.

Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.

Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

F. Notes to consolidated financial statements

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

3.6 Foreign currency

3.6.1 Foreign currency transactions

Subsidiaries, joint ventures and equity-accounted investees record transactions in the functional currency of the economic environment in which they operate. Transactions in currencies other than the functional currency of the subsidiary, joint ventures and equity investees are recorded at the rates of exchange prevailing at the date of the transaction.

Monetary assets and liabilities in currencies other than the functional currency are translated at the rates of exchange prevailing at the balance sheet date and gains and losses are reported in the statement of income.

3.6.2 Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to USD at exchange rates at the reporting date. The income and expenses of foreign operations, excluding foreign operations in hyperinflationary economies, are translated to USD at the average rate for the year that is considered as the best estimate of transaction dates. The resulting exchange differences are recorded in equity through other comprehensive income and are included in the statement of income upon sale or liquidation of the underlying foreign operation.

Group entities, with a functional currency being the currency of a hyperinflationary economy, first restate their financial statements in accordance with IAS 29, Financial Reporting in Hyperinflationary Economies (refer to 'Reporting in hyperinflationary economies' below). The related income, costs and balance sheet amounts are translated at the foreign exchange rate ruling at the balance sheet date.

3.6.3 Reporting in hyperinflationary economies

When the economy of a country in which the Group operates is deemed hyperinflationary and the functional currency of a Group entity is the currency of that hyperinflationary economy, the financial statements of such Group entities are adjusted so that they are stated in terms of the measuring unit current at the end of the reporting period. This involves restatement of income and expenses to reflect changes in the general price index from the start of the reporting period and restatement of non-monetary items in the statement of financial position to reflect current purchasing power as at the period end using a general price index from the date when they were first recognised. Comparative amounts are not adjusted. Any differences arising were recorded in equity on adoption.

The only hyperinflationary economy applicable to the Group is Argentina. The financial statements of the subsidiaries in this country are first adjusted for the effect of inflation with any gain or loss on the net monetary position recorded in the related functional lines in the statement of income and then translated into USD. Refer to Note 38.

3.7 Financial instruments

Financial assets are classified in the following measurement categories:

- Fair value through other comprehensive income;
- Fair value through profit or loss;
- Amortised cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows. For investments in debt instruments, this will depend on the business model in which the investment is held. For investments in equity instruments, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income.

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset.

The Group reclassifies debt investments only when its business model for managing these assets changes. Reclassification takes place on the first day of the financial year following the financial year in which the business model changes.

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss as incurred.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e. the date that the Group commits to purchase or sell the asset.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in such transferred financial assets that is created or retained by the Group is recognised as a separate asset or liability.

3.7.1 Financial assets at fair value through other comprehensive income

Financial assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment losses, interest revenue and foreign exchange gains and losses, which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss and recognised in other gains and losses. Interest income from these financial assets is included in finance income using the effective interest rate (EIR) method.

Where Group management has elected to present fair value gains and losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to the statement of income. Dividends from such investments continue to be recognised in the statement of income as other income when the Group's right to receive payments is established. There are no impairment requirements for equity investments measured at fair value through other comprehensive income.

3.7.2 Financial assets at fair value through profit or loss

The Group classifies the following financial assets at fair value through profit or loss:

- Equity investments that are held for trading;
- Equity investments for which the entity has not elected to recognise fair value gains and losses through other comprehensive income;
- Debt investments that do not qualify for measurement at amortised cost;
- Debt investments that do not qualify for measurement at fair value through other comprehensive income;
- Debt investments that have been designated at fair value through profit or loss.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value presented as other income and expenses in the statement of income. Interests, dividends and gain or loss on foreign exchange on financial assets at fair value through profit or loss are included separately in finance income or expense, or other income and expense, respectively.

Trade and other receivables, and trade and other payables related to commodity contracts including provisional pricing features are measured at fair value through profit or loss applying a Level 2 valuation. The related net changes in fair value are presented under cost of sales.

3.7.3 Amortised cost

The Group classifies its financial assets as at amortised cost only if both of the following criteria are met:

- The asset is held within a business model with the objective of collecting the contractual cash flows;
- The contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

Financial assets at amortised cost include loans receivable, trade and other receivables, and other financial assets that are held with the objective of collecting contractual cash flows. After initial measurement at fair value, the financial assets are measured at amortised cost using the EIR method, less impairment.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit or loss. The losses arising from impairment are recognised in the statement of income in other income and expense.

The Group enters into prepayment agreements where purchases of commodities are prepaid. When the prepayment agreement can be settled in cash or another financial asset, it is classified at amortised cost in line with IFRS 9. When settlement of the prepayment agreement solely occurs by having the commodities physically delivered, these agreements are not classified as financial instruments as they do not meet the definition of a financial asset. For the clauses in the contracts which might result in cash settlement instead of physical delivery, the objective of the contract and the economic reality of such clauses determine the classification. Interest received on prepayment agreements is presented in finance income in the statement of income.

3.7.4 Offsetting

Financial assets and liabilities are offset and the net amount presented in the statement of financial position if, and only if, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

3.7.5 Non-derivative financial liabilities

The Group measures non-derivative financial liabilities at amortised cost. The non-derivative financial liabilities are recognised initially at fair value less any directly attributable transaction costs. Subsequent to initial recognition, the financial liabilities are measured at amortised cost using the effective interest method.

The Group derecognises a financial liability when its contractual obligations are discharged, cancelled or expired.

3.8 Derivative financial instruments, including hedge accounting

Derivative instruments, which include physical contracts to sell or purchase commodities that do not meet the own use exemption, are initially recognised at fair value when the Group becomes a party to the contractual provisions of the instrument and are subsequently remeasured to fair value at the end of each reporting period. Any attributable transaction costs are recognised in the statement of income as incurred.

The Group utilises derivative financial instruments (shown separately in the statement of financial position) to hedge its primary market risk exposures, primarily risks related to commodity price movements, and to a lesser extent, exposure to foreign currency exchange rates and interest rate movements. Commodity derivative contracts may be utilised to hedge against commodity price risk for fixed-priced physical purchase and sales contracts, including inventory. Commodity swaps, options and futures are used to manage price and timing risks in conformity with the Group's risk management policies.

Generally, the Group does not apply hedge accounting, but in some instances it may elect to apply hedge accounting. Those derivatives qualifying and designated as hedges are either (i) a fair value hedge of the change in fair value of a recognised asset or liability or an unrecognised firm commitment, or (ii) a cash flow hedge of the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable transaction.

F. Notes to consolidated financial statements

The Group elects to apply fair value hedge accounting to hedge certain risk components of non-financial hedged items. When applicable, the Group designates derivative hedging instruments as fair value hedges in relationship to the hedged item. The hedged item may be individual risk components that are separately identifiable and reliably measurable. The hedged item is accounted for at fair value through profit and loss and reflected in the statement of financial position as either a recognised asset or liability or an unrecognised firm commitment. Each of the identified risk components of the hedged item will be revalued at each period with its corresponding benchmark accounted for at fair value and recognised through profit and loss, and reflected on the statement of financial position as either a recognised asset or liability or an unrecognised firm commitment. The Group documents at the inception of the hedging transaction the economic relationship between hedging instruments and hedged items, including whether the hedging instrument is expected to offset changes in cash flows of hedged items.

A change in the fair value of derivatives designated as a fair value hedge is reflected together with the change in the fair value of the hedged item in the statement of income. A change in the fair value of derivatives designated as a cash flow hedge is initially recognised as a cash flow hedge reserve in OCI. The deferred amount is then released to the statement of income in the same periods during which the hedged transaction affects the statement of income.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity are reclassified to the statement of income when the underlying hedged item is realised in the statement of income.

If the hedge ratio for risk management purposes is no longer optimal but the risk management objective remains unchanged and the hedge continues to qualify for hedge accounting, the hedge relationship will be re-calibrated by adjusting either the volume of the hedging instrument or the volume of the hedged item so that the hedge ratio aligns with the ratio used for risk management purposes. Any hedge ineffectiveness is calculated and accounted for at the time of the hedge relationship re-calibration.

3.8.1 Current versus non-current classification

Derivative instruments that are not designated as effective hedging instruments are classified as current or non-current, or separated into current and non-current portions based on an assessment of the facts and circumstances (i.e., the underlying contractual cash flows). Where the Group will hold a derivative as an economic hedge (and does not apply hedge accounting) for a period beyond 12 months after the reporting date, the derivative is classified as non-current (or separated into current and non-current portions).

3.9 Cash and cash equivalents

For the purpose of the statement of cash flows, cash and cash equivalents consist of all cash on hand and short-term highly liquid investments such as deposits with original maturities of three months or less.

3.10 Property, plant and equipment

3.10.1 Recognition and measurement

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. The initial cost of an asset comprises its purchase price or construction cost, any costs directly attributable to bringing the asset into operation, the initial estimate of any decommissioning obligation, if any, and, for qualifying assets, borrowing costs. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components). The costs of major repairs and maintenance (dry-docking or turnarounds) are capitalised and depreciated over their useful life.

Gains or losses on disposal of an item of property, plant and equipment are recorded in the statement of income in other income and expense.

The carrying amount of property, plant and equipment is reviewed for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable.

Assets in the course of construction are capitalised as separate components of property, plant and equipment, included within other fixed assets. Upon completion, the cost of construction is transferred to the appropriate category.

3.10.2 Mineral properties and mine development costs

The costs of acquiring mineral reserves and mineral resources are capitalised in the statement of financial position as incurred. Capitalised costs representing mine development costs include costs incurred to bring the mining assets to a condition of being capable of operating as intended by management. Mineral reserves and in some instances mineral resources and capitalised mine development costs are depreciated from the commencement of production using, generally, the unit of production basis. They are written off if the property is abandoned.

3.10.3 Exploration and evaluation assets

Exploration and evaluation expenditure relates to costs incurred in the exploration and evaluation of potential mineral reserves and resources, and includes costs such as exploratory drilling and sample testing, and the costs of pre-feasibility studies. Exploration and evaluation expenditure for each area of interest, other than that acquired from the purchase of another mining company, is capitalised as an asset provided that one of the following conditions is met:

- Such costs are expected to be recouped in full through successful development and exploration of the area of interest or alternatively, by its sale; or
- Capitalised exploration and evaluation assets are transferred to mine development assets once the work completed to date supports the future development of the property and such development receives appropriate approvals.

Acquired mineral rights comprise identifiable exploration and evaluation assets including mineral reserves and mineral resources, which are acquired as part of a business combination and are recognised at fair value at the date of acquisition. The acquired mineral rights are reclassified as "mineral properties and mine development costs" from commencement of development and depreciated on a unit of production basis, when commercial production commences.

3.10.4 Subsequent costs

Subsequent expenditure is capitalised only when it is probable that the future economic benefits associated with the expenditure will flow to the Group.

3.10.5 Major cyclical maintenance expenditure

Group entities recognise in the carrying amount of an item of plant and equipment, the incremental cost of replacing a component part of such an item when that cost is incurred. If it is probable that the future economic benefits embodied within the item will flow to the Group entity, the cost incurred is significant in relation to the asset and the cost of the item can be measured reliably. Accordingly, major overhaul expenditure is capitalised and depreciated over the period in which benefits are expected to arise (typically three to four years). Any remaining book value of a maintenance component of property, plant and equipment to which the major maintenance is applied, is derecognised at that point in time. All other repairs and maintenance are charged to the statement of income during the financial period in which the costs are incurred.

3.10.6 Depreciation

Items of property, plant and equipment are depreciated on a straight-line basis over the estimated useful lives of each component. They are depreciated from the date that they are installed and are ready for use. Land and assets under construction are not depreciated.

Depreciation of assets held under finance leases is calculated over the shorter of the lease term or the estimated useful life of the asset.

The estimated useful lives for the current and comparative years of significant items of property, plant and equipment are as follows:

- Buildings 20-50 years
- Machinery and equipment 3-50 years
- Barges and vessels 10-20 years
- Other fixed assets 1-10 years

Unit of production basis

For mining properties and development assets and certain mining equipment, the economic benefits from the asset are consumed in a pattern which is linked to the production level. Such assets are depreciated on a unit-of-production basis. However, assets within mining operations for which production is not expected to fluctuate significantly from one year to another or which have a physical life shorter than the related mine are depreciated on a straight-line basis as noted above.

In applying the unit-of-production method, depreciation is normally calculated using the quantity of material extracted from the mine in the period as a percentage of the total quantity of material to be extracted in current and future periods based on proved and probable reserves and, for some mines, other mineral resources. Such non-reserve material may be included in depreciation calculations in circumstances where there is a high degree of confidence in its economic extraction.

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment.

Critical spare parts purchased for particular items of plant are capitalised and depreciated on the same basis as the plant to which they relate.

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

3.10.7 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are calculated using the EIR method and are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised.

All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs directly in connection with the borrowing of funds.

3.11 Intangible assets and goodwill

3.11.1 Goodwill

Goodwill that arises on the acquisition of subsidiaries is presented with intangible assets. For the measurement of goodwill at initial recognition refer to Note 3.4.

Goodwill is measured at cost less accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units (CGUs) or group of CGUs that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a CGU and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain and loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and any impairment loss is allocated to the carrying amount of the equity-accounted investee as a whole.

F. Notes to consolidated financial statements

3.11.2 Licences and other intangible assets

Licences and other intangible assets, including software development costs, are stated at cost, less accumulated amortisation and accumulated impairment losses. Licences are amortised over the term of the licence, generally not exceeding 10 years.

An intangible asset acquired as part of a business combination is measured at fair value at the date of acquisition and is recognised separately from goodwill if the asset is separable or arises from contractual or other legal rights.

Intangible assets with finite lives are amortised over their useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each reporting date. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, and treated as changes in the accounting estimates.

Gains or losses on disposal of intangible assets are recorded in the statement of income in other income and expense.

3.12 Leases

3.12.1 Leases prior to 1 October 2019

Until 30 September 2019, the Group classified its leases as operating or finance leases based upon whether the lease arrangement transferred substantially all the risks and rewards of ownership in accordance with IAS 17.

When the Group is the lessee

As a lessee, for finance leases, an asset and a liability were recognised at an amount equal to the lower of the fair value of the leased asset or the present value of the minimum lease payments during the lease term. Such assets were amortised on a straight-line basis over the shorter of the lease term or the estimated useful life of the asset taking into account the residual value, with depreciation included in depreciation expense. Leases that did not qualify as finance leases were classified as operating leases, and the related payments (net of incentives received from the lessor) were expensed on a straight-line basis over the lease term.

When the Group is the lessor

The Group operates as a (intermediate) lessor in time-charter arrangements. For operating leases, the Group recognised chartering income on a straight-line basis over the lease term. For finance leases, the underlying asset was derecognised and the Group recognised a finance lease receivable at the amount of its net investment.

3.12.2 Leases from 1 October 2019

When the Group is the lessee

As a lessee, from 1 October 2019 onwards, with the adoption of IFRS 16, at inception of a contract the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether:

- The contract involves the use (explicitly or implicitly) of an identified asset;
- The Group has the right to obtain substantially all of the economic benefits throughout the period of use;
- The Group has the right to direct the use of the asset.

This policy is applied to all lease contracts except for short-term leases and leases of low-value assets as from 1 October 2019 onwards. If a contract is, or contains a lease, the Group accounts a lease component separately from non-lease components. As a lessee, the Group allocates the consideration in the contract based on the relative stand-alone price of components, and the aggregate stand-alone price of the non-lease components (if applicable).

For all leases, the Group recognises a right-of-use asset (ROU) and a corresponding liability at the date at which the leased asset is available for use. Assets and liabilities arising from a lease are initially measured on a present value basis. The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate of interest that the lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. Generally, the Group uses its incremental borrowing rate as the discount rate. The incremental borrowing rate is determined using recent third-party financing received adjusted for both changes in financing conditions since third-party financing was received and for terms specific to leases.

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

Lease payments included in the measurement of the lease liability include the following:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivables;
- Variable lease payments that are based on an index or a rate;
- Amounts expected to be payable by the lessee under residual value guarantees;
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option;
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The ROU asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, any initial direct costs, and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located less any lease incentives received.

Subsequent to initial recognition, the lease liability is measured at amortised cost using the effective interest method, and the ROU asset is depreciated on a straight-line basis, from the commencement date to the earlier of the end of the useful life of the right-of-use asset, or the end of the lease term.

The lease liability is remeasured when:

- There is a change in future lease payments arising from changes in an index or rate;
- There is a change in the Group's assessment of whether it will exercise an extension option; or
- There are modifications in the scope or the consideration of the lease that were not part of the original term.

The lease liability is remeasured with a corresponding adjustment to the ROU asset, or is recorded in profit or loss if the carrying amount of the ROU asset has been reduced to zero.

When the Group is the (intermediate) lessor

The accounting policy applicable to the Group as a lessor in the comparative period were the same under IAS 17 except for subleases, when the Group acts as an intermediate lessor.

Subleases

When the Group acts as an intermediate lessor, it accounts for its interest in the head lease and the sub-lease separately. The classification of the sub-lease is assessed with reference to the ROU asset of the head lease, and not the underlying asset. If a head lease is a short-term lease, and the exemption below has been applied, the sub–lease is classified as an operating lease. If the sub-lease is classified as a finance lease, the Group derecognises the ROU asset and instead recognises a finance lease receivable at the amount of its net investment, which is the present value of all remaining lease payments. Any difference between the ROU asset and the finance lease receivable is recognised in profit or loss, when the finance lease receivable is recognised. Lease liability relating to the head lease is retained in the statement of financial position, which represents the lease payments owed to the head lessor.

For any arrangements that contain lease and non-lease components, as an intermediate lessor, the Group allocates the consideration in the contract based on a relative stand-alone selling basis.

Subsequent to initial recognition, the Group, as intermediate lessor, accrues interest income on the net investment. The receipts under the lease are allocated between the receivable and the finance income to produce a constant rate of return on the net investment.

The Company, as a lessor, assesses the risk with respect to leased assets as limited and not material. Lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes. Any allowances for expected credit losses are recognised against finance lease receivables as required by IFRS 9, if applicable.

3.13 Inventories

Trading-related inventories are measured at fair value less costs to sell. Fair value movements are included in cost of sales.

Inventories of non-trading related products, including work-in-progress, are measured at the lower of cost or net realisable value. Costs comprise all costs of purchases and other costs incurred.

3.14 Impairment of financial instruments and prepayments

3.14.1 Non-derivative financial assets

The Group assesses the expected credit losses associated with its debt instruments, prepayments and trade receivables carried at amortised cost and fair value through other comprehensive income. The impairment provisions for financial assets and prepayments are disclosed in Notes 18, 19 and 20 are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation. This judgement is based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period.

3.14.2 Trade receivables

The Group applies the simplified approach to providing for expected credit losses, which permits the use of the lifetime expected loss provision for all trade receivables. In calculating the expected credit loss rates for trade receivables, the Group considers historical loss rates for each category of counterparties, and adjusts for forward-looking macroeconomic data. Refer to Note 23 for the loss provision on trade receivables.

3.14.3 Loans receivable and prepayments

Over the term of the loans and the prepayments, the Group manages its credit risk by appropriately providing for expected credit losses on a timely basis. The Group classifies its loans receivable and prepayments in categories that reflect their credit risk as follows:

Category	Group definition of category	Basis for recognition of expected credit loss provision
Performing	Customers have a low risk of default and a strong capacity to meet contractual cash flows	12 month expected losses. Where the expected lifetime of an asset is less than 12 months, expected losses are measured at its expected lifetime.
Underperforming	A significant increase in credit risk is noted (see definition below)	Lifetime expected losses
Non-performing	The loan meets the definition of default (see below)	Lifetime expected losses
Write-off	Based on observable data the interest and/or principal will not be collected	Asset is written off through profit or loss to extent of expected loss

A significant increase in credit risk is presumed if interest and/or principal repayments are 30 days past due or if there are other indicators of a significant increase in the probability of default. A default is defined when a counterparty structurally fails to perform under a financial contract with a Trafigura Group company and such failure is not expected to be cured shortly.

F. Notes to consolidated financial statements

The Group assesses the expected credit loss of these loans and prepayments individually based on the discounted product of probability of default (PD), exposure at default (EAD) and loss given default (LGD) as defined below:

- PD represents the likelihood of a borrower defaulting on its financial obligation, either over the next 12 months or over the remaining lifetime of the obligation.
- EAD is based on the amounts the Group expects to be owed at the time of default. For most cases, this represents the carrying amount of the financial asset.
- LGD represents the Group's expectation of the extent of loss on a defaulted exposure. LGD varies by type of counterparty, seniority of claim and available collateral or other credit support. LGD is expressed as a percentage loss per unit of exposure at the time of default.

The ECL is determined by projecting PD, EAD and LGD for each future month and for each exposure. These three components are multiplied together and discounted at the original effective interest rate of the loan and the prepayment. The PD and LGD are developed by utilising historical default studies and publicly available data.

Refer to Note 18 for the loss provision on prepayments and Note 19 for the loss provision on loans receivable.

3.14.4 Write-off

The Group reduces the gross carrying amount of a financial asset when there is no reasonable expectation of recovering a financial asset in its entirety or a portion thereof. A write off constitutes a derecognition event.

3.15 Accrued turnover

Accrued turnover relates to sales made before the end of the year that have not been invoiced at the balance sheet date. Reasons for such delays include the need to determine final pricing, quantity and quality analysis. All are typical of the industry in which the Group operates.

3.16 Employee benefits

3.16.1 Post-employment benefits

Pensions and other post-employment benefits, wages, salaries, bonuses, social security contributions, paid annual leave and sick leave are accrued in the period in which the associated services are rendered by employees of the Group. The cost of providing benefits under the defined benefit plans is determined separately for each plan using the projected unit credit method. Unvested past service costs are recognised as an expense on a straight-line basis over the average period until the benefits become vested. Past service costs are recognised immediately if the benefits have already vested immediately following the introduction of, or changes to, a pension plan.

When a settlement (eliminating all obligations for benefits already accrued) or a curtailment (reducing future obligations as a result of a material reduction in the scheme membership or a reduction in future entitlement) occurs, the obligation and related plan assets are remeasured using current actuarial assumptions and the resultant gain or loss is recognised in profit or loss during the period in which the settlement or curtailment occurs.

The interest element of the defined benefit cost represents the change in present value of scheme obligations resulting from the passage of time, and is determined by applying the discount rate to the opening present value of the benefit obligation, taking into account material changes in the obligation during the year. The expected return on plan assets is based on an assessment made at the beginning of the year of long-term market returns on plan assets, adjusted for the effect on the fair value of plan assets of contributions received and benefits paid during the year. Actuarial gains and losses are recognised in full within other comprehensive income in the year in which they occur.

The defined benefit pension plan surplus or deficit in the statement of financial position comprises the total for each plan at the present value of the defined benefit obligation (using a discount rate based on high-quality corporate bonds), less the fair value of plan assets out of which the obligations are to be settled directly. Fair value is based on market price information and, in the case of quoted securities, is the published bid price. Contributions to defined contribution schemes are recognised in profit or loss in the period in which they become payable.

3.16.2 Employee share incentive plan and employee share trust

Employees of the Group receive remuneration in the form of shares of the immediate holding company Trafigura Beheer B.V. as consideration for services rendered. This is considered an equity settled share scheme as the Company neither has a present legal nor constructive obligation to settle in cash, nor has a past practice or stated policy of settling in cash.

The cost of the equity-settled transactions is measured at fair value at the grant date taking into account the terms and conditions upon which the shares were granted. This fair value is expensed over the vesting period with a corresponding credit to equity. For shares that immediately vest, the fair value is expensed in the accounting period corresponding to the date of grant.

3.17 Provisions

The Group recognises provisions for liabilities and onerous contracts that have been incurred as of the balance sheet date and can be reliably estimated. A provision is recognised when (i) the Group has a present obligation (legal or constructive) as a result of a particular event; (ii) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and (iii) an estimate can be made of the amount of the obligation.

Provisions for claims, disputes and legal proceedings are recorded if it is probable that the Group will be liable in a proceeding, for the estimated amount at which the liability can be settled. If no reliable estimate can be made, a disclosure will be made for claims, disputes or legal proceedings, for which the amount to be settled is expected to be significant.

3.17.1 Restoration, rehabilitation and decommissioning

Restoration, rehabilitation and decommissioning costs arising from the installation of plant and other site preparation work, discounted to their net present value, are provided for and capitalised at the time such an obligation arises. The costs are charged to the statement of income over the life of the operation through depreciation of the asset and the unwinding of the discount on the provision.

3.17.2 Onerous contracts

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Group recognises any impairment loss on the assets associated with that contract.

3.18 Accrued costs of sales and expenses

The accrued cost of sales and expenses relate to purchases and expenses made before the year end that have not been invoiced at the balance sheet date. Reasons for such delays include the need to determine final pricing, quantity and quality analysis. All are typical of the industry in which the Group operates.

3.19 Revenue recognition

Revenue is derived principally from the sale of goods and in some instances the goods are sold on Cost and Freight (CFR) or Cost, Insurance and Freight (CIF) Incoterms. When goods are sold on a CFR or CIF basis, the Group is responsible for providing these services (shipping and insurance) to the customer, sometimes after the date at which the Group has lost control of the goods. Revenue is recognised when the performance obligations have been satisfied, which is once control of the goods and/or services has transferred from the Group to the buyer.

Revenue is measured based on consideration specified in the contract with a customer and excludes amounts collected on behalf of third parties. The same recognition and presentation principles apply to revenues arising from physical settlement of forward sale contracts that do not meet the own use exemption. Revenue related to the sale of goods is recognised when the product is delivered to the destination specified by the customer, which is typically the vessel on which it is shipped, the destination port or the customer's premises, and the buyer has gained control through their ability to direct the use of and obtain substantially all the benefits from the asset. Where the sale of goods is connected with an agreement to repurchase goods at a later date, revenue is recognised when the repurchase terms are at prevailing market prices, the goods repurchased are readily available in the market, and the buyer gained control of the goods originally sold to them. Should it be determined that control has not transferred or the buyer does not have the ability to benefit substantially from ownership of the asset, revenue is not recognised and any proceeds received are accounted for as a financing arrangement.

For certain commodities, the sales price is determined on a provisional basis at the date of sale as the final selling price is subject to movements in market prices up to the date of final pricing, normally ranging from 30 to 90 days after initial booking (provisionally priced sales). Revenue on provisionally priced sales is recognised based on the estimated fair value of the total consideration receivable. The revenue adjustment mechanism embedded within provisionally priced sales arrangements has the character of a commodity derivative. Accordingly, the fair value of the final sales price adjustment is re-estimated continuously. In all cases, fair value is estimated by reference to forward market prices.

Revenue related to the provision of shipping-and-insurance-related activities is recognised over time as the service is rendered.

3.20 Cost of sales

Cost of sales includes the purchase price of the products sold, as well as the costs of purchasing, storing and transporting the products. It also includes the changes in mark-to-market valuation of inventories, all derivatives and forward contracts.

3.21 Selling, general and administrative expenses

Selling, general and administrative expenses include the Group's corporate offices, rent and facility costs, staff costs, depreciation and certain other general and administrative expenses. As the Group chooses to present the gross profit as the result from the trading activities, these costs are not attributed to cost of sales.

3.22 Finance income and finance expense

Interest income and interest expense are recognised on a time-proportion basis using the EIR method.

3.23 Corporate taxes

Income tax expense comprises current and deferred tax. Current and deferred tax are recognised in the statement of income except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

3.23.1 Current income tax

Current income tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. The charge for taxation includes Singaporean and foreign corporate income taxation. Due to the different statutory rates applicable and non-deductible expenses, the Group effective tax charge differs from the statutory tax rate applicable in Singapore.

3.23.2 Deferred tax

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes, and the amounts used for taxation purposes. The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis, or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

F. Notes to consolidated financial statements

3.23.3 Tax exposure

In determining the amount of current and deferred tax the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact the tax expense in the period that such a determination is made.

3.24 Assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sales transaction rather than through continuing use. For this to be the case, the asset or disposal group must be available for immediate sale in its present condition subject only to terms that are usual and customary for the sale of such assets or disposal groups, and its sale must be highly probable. All assets and liabilities of a subsidiary classified as a disposal group are reclassified as held for sale regardless of whether the Group retains a non-controlling interest in its former subsidiary after the sale.

Non-current assets and disposal groups (other than financial assets) classified as held for sale are measured at the lower of their carrying amounts and fair values less costs to sell. Property, plant and equipment and intangible assets classified as held for sale are not depreciated or amortised.

3.25 Segments

The Group's operating segments are established on the basis of the components of the Group that are evaluated regularly by the chief operating decision maker (CODM) in deciding how to allocate resources and in assessing performance.

3.26 Use of estimates and judgements

The preparation of the Group's financial statements in compliance with IFRS requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period.

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, and are used to judge the carrying amount of assets and liabilities that are not readily apparent from other sources. Actual outcomes could differ from those estimates. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

The Group has identified the following areas as being critical to understanding its financial position as they require management to make complex and/or subjective judgements and estimates about matters that are inherently uncertain.

3.26.1 Valuation of financial assets, including derivative and level 3 instruments

Derivative instruments are carried at fair value and the Group evaluates the quality and reliability of the assumptions and data used to measure fair value in the three hierarchy levels, Levels 1, 2 and 3, as prescribed by IFRS 13. Fair values are determined in the following ways: externally verified via comparison to quoted market prices in active markets (Level 1); by using models with externally verifiable inputs (Level 2); or by using alternative procedures such as comparison to comparable instruments and/or using models with unobservable market inputs requiring the Group to make market-based assumptions (Level 3). For more details refer to Note 35. For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between Levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

3.26.2 Discount rates

In absence of interest rates implicit in the lease contracts, the Group applies the incremental borrowing rate (IBR) as the discount rate to determine the lease liabilities. The IBR is an approximation of the rate that a lessee would pay to attract the required funding to purchase the asset over a similar term, with similar security and in a similar economic environment. The IBR is determined as the sum of a reference rate, a financing spread adjustment and a lease specific adjustment. A single IBR may be applied to a portfolio of leases, which are similar in nature and lease term. Refer to Note 16.

3.26.3 Impairments

Investments in Associates and other investments, loans receivables, prepayments, property, plant and equipment and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable or at least annually for goodwill. If an asset's recoverable amount is less than the asset's carrying amount, an impairment loss is recognised. Loans and receivables are evaluated based on collectability. Future cash flow estimates which are used to calculate the asset's fair value are based on expectations about future operations, primarily comprising estimates about production and sales volumes, commodity prices, operating, rehabilitation and restoration costs and capital expenditures. Changes in such estimates could impact recoverable values of these assets. Estimates are reviewed regularly by management. For more details refer to Note 11.

3.26.4 Provisions

The amount recognised as a provision, including tax, legal, restoration and rehabilitation, contractual and other exposures or obligations, is the best estimate of the consideration required to settle the related liability, including any related interest charges, taking into account the risks and uncertainties surrounding the obligation. The Group assesses its liabilities and contingencies based upon the best information available, relevant tax laws and other appropriate requirements. For more details refer to Notes 30 and 33.

3.26.5 Restoration, rehabilitation and decommissioning costs

A provision for future restoration, rehabilitation and decommissioning costs requires estimates and assumptions to be made around the relevant regulatory framework, the magnitude of the possible disturbance and the timing, extent and costs of the required closure and rehabilitation activities. To the extent that the actual future costs differ from these estimates, adjustments will be recorded and the statement of income could be impacted. The provisions including the estimates and assumptions contained therein are reviewed regularly by management. For more details refer to Note 30.

3.26.6 Taxation

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. These judgements are subject to risk and uncertainty and hence, to the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in the statement of income in the period in which the change occurs. The recoverability of deferred tax assets, including the estimates and assumptions contained therein, are reviewed regularly by management. For more details refer to Note 13.

3.26.7 Determination of control of subsidiaries and joint arrangements

Judgement is required to determine whether the Group controls an entity, and consequently, whether it needs to consolidate that entity into the consolidated financial statements. Specifically, the Group assesses whether it has the power over the relevant activities of the entity, exposure to its variable returns or the ability to use power to impact returns of the entity.

The Group has certain investments in companies, which are not consolidated and whose results are accounted for in the Group's consolidated financial statements based on their equity share ownership. The most significant of the Group's investments are the 55.5 percent investment in Puma Energy Holdings Pte. Ltd. (Puma), the 50 percent investment in TM Mining Ventures S.L. (MATSA), and the 50 percent investment in Impala Terminals Holding S.à r.l. (Simba).

Judgement is also required in determining the classification of a joint arrangement between a joint venture or a joint operation through an evaluation of the rights and obligations arising from the arrangement. The impact of the decision regarding the existence of control, and classification of joint arrangements, significantly impacts the accuracy, completeness and presentation of the financial statements and, potentially, the debt covenant ratios which are included in the Group's debt financing agreements.

4. Adoption of new and revised standards

4.1 IFRS 16 – Leases

The Group has initially adopted IFRS 16 as from 1 October 2019. IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment (on-balance sheet) in the financial statements of both lessees and lessors. The Group applied the modified retrospective approach and therefore the cumulative effect of initially applying IFRS 16 is recognised at the date of initial application, with no restatement of comparative information.

4.1.1 Transition

The Group elected not to apply the practical expedient to grandfather the assessment of which transactions are considered to be leases and therefore assessed whether existing contracts were/or contained a lease in accordance with IFRS 16, at the date of initial application (1 October 2019).

On initial application of IFRS 16, the Group has elected to apply the following practical expedients permitted by the standard:

- To apply a single discount rate on a portfolio of leases with reasonably similar characteristics;
- Reliance on previous assessments on whether leases are onerous as an alternative to performing an impairment review;
- To account for leases with a remaining lease term of less than 12 months as at 1 October 2019 as short-term leases;
- To account for contracts for which the underlying asset has a low value (on acquisition) as low-value leases;
- To exclude initial direct costs for the measurement of the ROU assets at the date of initial application; and
- The use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

The Group has elected not to recognise ROU assets and lease liabilities for short-term leases with a lease term of 12 months or less (which do not include a purchase option) and leases of low value assets (i.e., acquisition costs of USD10,000 when new). Instead, expenses related to both short-term leases and low-value leases are recognised as incurred.

For all leases previously classified as operating leases on 1 October 2019, the Group has applied the following transition provisions:

i) On a lease-by-lease basis, the Group chose to measure its ROU assets at an amount equal to lease liabilities, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the statement of financial position immediately before the date of initial application (i.e., 1 October 2019).

ii) Recognised its lease liabilities by discounting the remaining lease payments as at 1 October 2019 using the incremental borrowing rate for a portfolio of leases with reasonably similar characteristics.

F. Notes to consolidated financial statements

4.1.2 Impact on transition

On 1 October 2019, the date of initial application of IFRS 16, the Group recognised ROU assets and lease liabilities of USD2.8 billion. Further, due to the chartering relet-arrangements the Group recognised lease receivables of USD197 million, with a corresponding reduction of the ROU assets. The Group discounted lease payments using its incremental borrowing rate at 1 October 2019. The weighted average incremental borrowing rate applied is 4.6%.

An explanation of the differences between the commitments previously disclosed in the Group's financial statements as at 30 September 2019 and the lease liabilities recognised in the statement of financial position as at 1 October 2019 are as follows:

	1 October 2019 USD'M
Operating lease commitments as at 30 September 2019	**4,372.8**
Adjustments	25.2
Contracts assessed as service arrangements	(1,167.4)
Contracts assessed as low value	–
Contracts assessed as short term	(223.4)
Undiscounted lease commitments as at 30 September 2019	**3,007.1**
Effect of discounting, using the incremental borrowing rate at 1 October 2019	(290.4)
Adjustments related to reasonably certain renewal options	43.1
Adjustments related to variable payments based on an index	5.0
Lease liabilities as at 1 October 2019	**2,764.9**
Of which are:	
Current	843.7
Non-current	1,921.2

The initial value of the ROU assets is determined as follows:

	1 October 2019 USD'M
Amount equal to lease liability as at 1 October 2019	**2,764.9**
Adjusted for:	
Reclassification to lease receivables	(197.3)
Right-of-use assets as at 1 October 2019	**2,567.6**

The impact on the statement of financial position at 1 October 2019 is as follows:

	30 September 2019 USD'M	IFRS 16 impact USD'M	1 October 2019 USD'M
Right-of-use assets	–	2,567.6	2,567.6
Lease receivables	–	197.3	197.3
Total assets	54,151.4	2,764.9	56,916.3
Total group equity	6,804.7	–	6,804.7
Long-term lease liabilities	–	1,921.2	1,921.2
Short-term lease liabilities	–	843.7	843.7
Total group equity and liabilities	54,151.4	2,764.9	56,916.3

4.1.3 Impact on financial year ending 30 September 2020

The impact on the income statements for the financial year ending 30 September 2020 is as follows:

	2020 Excluding USD'M	IFRS 16 impact USD'M	2020 Including USD'M
Revenue	146,994.3	–	146,994.3
Cost of sales	(141,197.0)	997.2	(140,199.8)
Gross profit	**5,797.3**	**997.2**	**6,794.5**
General and administrative expenses	(1,239.5)	(915.6)	(2,155.1)
Impairments of PP&E and intangible fixed assets	(544.9)	(103.7)	(648.6)
Impairments of financial assets and prepayments	(395.1)	–	(395.1)
Impairments of equity-accounted investees	(524.2)	–	(524.2)
Other income/(expenses) – net	(294.7)	98.5	(196.2)
Results from operating activities	**2,798.9**	**76.4**	**2,875.3**
Finance income	492.2	7.9	500.1
Finance expense	(1,043.1)	(115.0)	(1,158.1)
Net financing costs	**(550.9)**	**(107.1)**	**(658.0)**
Share of profit/(loss) of equity-accounted investees	(327.0)	–	(327.0)
Profit before tax	**1,921.0**	**(30.7)**	**1,890.3**
Income tax expense	(296.0)	4.5	(291.5)
Profit for the period	**1,625.0**	**(26.2)**	**1,598.8**

The impact on the statement of financial position at 30 September 2020 is as follows:

	30 September 2020 Excluding USD'M	IFRS 16 impact USD'M	1 October 2020 Including USD'M
Right-of-use assets	–	2,091.5	2,091.5
Long-term lease receivables	–	124.1	124.1
Deferred tax assets	119.8	4.5	124.3
Short-term lease receivables	–	37.4	37.4
Total assets	54,728.1	2,257.5	56,985.6
Total group equity	7,816.1	(26.2)	7,789.9
Long-term lease liabilities	–	1,407.4	1,407.4
Short-term lease liabilities	–	981.6	981.6
Provisions	475.2	(103.7)	371.5
Trade and other payables	11,082.7	(1.6)	11,081.1
Total group equity and liabilities	54,728.1	2,257.5	56,985.6

4.2 IFRIC 23 – Uncertainty over income tax treatment

The interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12 Income Taxes. Due to its global reach, including operating in high-risk jurisdictions, the Group is subject to enhanced complexity and uncertainty, which may lead to uncertain tax treatments and the corresponding recognition and measurement of current and deferred taxes. The judgements and estimates made to separately recognise and measure the effect of each uncertain tax treatment are re-assessed whenever circumstances change or when there is new information that affects those judgments. The Group has re-assessed its global tax exposure and the key estimates taken in determining the positions recorded to adopt IFRIC 23. As of 1 October 2019, the global tax exposure has been determined by referencing to the uncertainty that the tax authority may not accept the Group's proposed treatment of tax positions. The adoption of the interpretation had no material impact on the Group.

4.3 Other standards

Several other amendments to existing standards apply for the first time in 2019, but do not have an impact on the consolidated financial statements of the Group.

4.4 New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 30 September 2020 reporting periods and have not been early adopted by the group:

- Definition of Material – amendments to IAS 1 and IAS 8;
- Definition of a Business – amendments to IFRS 3;
- Interest Rate Benchmark Reform – amendments to IFRS 9, IAS 39 and IFRS 7; and
- Revised Conceptual Framework for Financial Reporting.

4.4.1 Interest Rate Benchmark Reform

The amendments made to IFRS 7 Financial Instruments: Disclosures, IFRS 9 Financial Instruments and IAS 39 Financial Instruments: Recognition and Measurement provide certain reliefs in relation to interest rate benchmark reforms.

The amendments provide temporary relief from applying specific hedge accounting requirements to hedging relationships directly affected by inter-bank offered rate (IBOR) reform. The reliefs have the effect that IBOR reform should not generally cause hedge accounting to terminate. However, any hedge ineffectiveness continues to be recorded in the income statement. The reliefs will cease to apply when the uncertainty arising from interest rate benchmark reform is no longer present.

5. Operating segments

The Group's operating businesses are organised and managed separately according to the nature of the products, with each segment representing a strategic unit that offers different products and serves different markets.

Segment results that are reported to the Group's Chief Executive Officer (CEO), being the chief operating decision maker, include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

- The Oil and Petroleum Products segment is engaged in the sourcing, provision and storage of oil, at all stages from crude to finished products such as naphtha and gasoline. This includes the blending required to make gasoline in the various grades suitable for the different specifications relevant in different countries. The Oil and Petroleum Products segment also includes related freight activities.
- The Metals and Minerals segment trades copper, lead, zinc, aluminium, iron ore and coal in all forms including ores, concentrates and refined metals. There is involvement in all the various stages from mining through smelting to the finished metal. This segment also includes the Mining Group and Nyrstar and Impala activities. In addition to trading activities, the activities performed in this segment include the blending of metal concentrates, iron ore, coal and alumina, the smelting of zinc and lead concentrates, and warehousing and transportation. The Metals and Minerals segment also includes related freight activities.
- All other segments include holding companies, securitisation programmes, group financing facilities and some smaller operating companies.

Information regarding the results of each reportable segment is included below. Performance is measured based on segment gross profit, as included in the internal management reports that are reviewed by the Group's CEO. Segment gross profit is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

The accounting policies of the operating segments are the same as those described in the summary of significant accounting policies. The Group accounts for inter-segment sales and transfers where applicable as if the sales or transfers were to third parties.

F. Notes to consolidated financial statements

Reconciliations of reportable segment revenues, results, assets and liabilities, and other material items are as follows:

2020	Oil and Petroleum USD'M	Metals and Minerals USD'M	Corporate and Other USD'M	Total USD'M
Sales revenue from external customers	82,107.1	63,043.9	–	145,151.0
Service revenue from external customers	1,573.4	269.9	–	1,843.3
Revenue	**83,680.5**	**63,313.8**	**–**	**146,994.3**
Cost of sales	(78,421.5)	(61,778.4)	–	(140,199.8)
Gross profit	**5,259.0**	**1,535.4**	**–**	**6,794.5**
General and administrative expenses				(2,155.1)
Impairments of PP&E and intangible fixed assets*				(648.6)
Impairments of financial assets and prepayments				(395.1)
Impairments of equity-accounted investees				(524.2)
Other income/(expenses) – net				(196.2)
Finance income				500.1
Finance expense				(1,158.1)
Share of profit from equity-accounted investees				(327.0)
Income tax expense				(291.5)
Profit for the year				**1,598.8**

30 September 2020	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Segment assets and liabilities				
Equity-accounted investees	1,239.9	1,167.9	30.8	2,438.6
Other non-current assets	3,201.1	4,810.3	666.2	8,677.6
Non-current assets classified as held for sale	0.2	2.4	–	2.6
Total assets	21,308.7	29,472.8	6,204.0	56,985.5
Total liabilities	15,444.3	22,568.4	11,182.9	49,195.6
Other segment information				
Capital expenditure	116.6	309.6	64.3	490.5
Depreciation of right-of-use assets*	927.1	72.0	19.6	1,018.6
Depreciation and amortisation of PP&E and intangible fixed assets	29.8	266.0	54.8	350.7
Impairments of PP&E and intangible fixed assets*	131.2	516.0	1.5	648.6
Impairments of financial assets and prepayments	337.0	53.5	4.5	395.1
Impairment of equity-accounted investees	524.2	–	–	524.2

2019	Oil and Petroleum USD'M	Metals and Minerals USD'M	Corporate and Other USD'M	Total USD'M
Sales revenue from external customers	111,333.3	59,084.1	–	170,417.4
Service revenue from external customers	841.5	215.2	–	1,056.7
Revenue	**112,174.8**	**59,299.3**	**–**	**171,474.1**
Cost of sales	(110,493.4)	(58,110.9)	–	(168,604.3)
Gross profit	**1,681.4**	**1,188.4**	**–**	**2,869.8**
General and administrative expenses				(1,049.1)
Impairments of PP&E and intangible fixed assets*				(49.0)
Impairments of financial assets and prepayments				(20.6)
Impairments of equity-accounted investees				(34.6)
Other income/(expenses) – net				(68.0)
Finance income				700.4
Finance expense				(1,404.5)
Share of profit from equity-accounted investees				47.7
Income tax expense				(124.3)
Profit for the year				**867.8**

30 September 2019	Oil and Petroleum USD'M	Metals and Minerals USD'M	Corporate and Other USD'M	Total USD'M
Segment assets and liabilities				
Equity-accounted investees	2,196.4	1,188.6	31.5	3,416.5
Other non-current assets	1,792.4	4,157.1	1,411.1	7,360.6
Non-current assets classified as held for sale	–	2.2	–	2.2
Total assets	23,596.5	21,991.4	8,563.5	54,151.4
Total liabilities	18,020.0	15,802.2	13,524.5	47,346.7
Other segment information				
Capital expenditure	128.1	97.5	46.4	272.0
Depreciation of right-of-use assets	–	–	–	–
Depreciation and amortisation of PP&E and intangible fixed assets	31.9	101.5	67.4	200.8
Impairments of PP&E and intangible fixed assets	4.8	44.2	–	49.0
Impairments of financial assets and prepayments	1.1	19.6	–	20.7
Impairment of equity-accounted investees	0.3	34.3	–	34.6

Geographical information

The following table sets out information about the geographical location of the Group's revenue from external customers:

2020	Oil & Petroleum USD'M	Metals and Minerals USD'M	Total USD'M
Revenue from external customers			
Europe	20,846.6	8,041.4	28,888.0
Asia	28,228.6	34,525.5	62,754.2
North America	20,813.5	11,887.2	32,700.7
Latin America	7,728.7	948.7	8,677.5
Africa	2,752.2	2,520.0	5,272.2
Australia	693.2	399.6	1,092.8
Middle East	2,617.6	4,991.3	7,608.9
Total revenue from external customers	**83,680.4**	**63,313.7**	**146,994.3**

2019	Oil & Petroleum USD'M	Metals and Minerals USD'M	Total USD'M
Revenue from external customers			
Europe	35,258.4	7,543.0	42,801.4
Asia	30,893.7	33,814.1	64,707.8
North America	26,609.8	10,717.5	37,327.3
Latin America	10,566.0	1,080.5	11,646.5
Africa	4,533.1	1,541.9	6,075.0
Australia	837.0	141.2	978.2
Middle East	3,476.8	4,461.1	7,937.9
Total	**112,174.8**	**59,299.3**	**171,474.1**

6. Acquisitions of subsidiaries and non-controlling interests

6.1 Financial year 2020

There were no significant acquisitions of subsidiaries and non-controlling interest during the financial year ended 30 September 2020.

6.2 Financial year 2019

Acquisition of Nyrstar

On 31 July 2019, as part of the rescue restructuring of the Nyrstar group, the Group acquired 98 percent of the voting shares of NN2 NewCo Limited (NN2, together with its subsidiaries, Nyrstar), a non-listed company incorporated in the United Kingdom. NN2 is the holding company of the operating business of Nyrstar, a global multi-metals business. The acquisition of the 98 percent shareholding agreed between Nyrstar's creditors was sanctioned by two English schemes of arrangement and confirmed by the US courts, and gave effect to:

- Reinstatement of financing facilities with Nyrstar's financial creditors;
- Completion of a new money facility;
- Issuance of bond instruments by Trafigura (refer to purchase consideration below); and
- An in-principle agreement with the State of South Australia on the key terms of the restructuring of the Port Pirie Perpetual Securities.

The Group acquired the operating assets of Nyrstar as part of the restructuring of Nyrstar with its creditors with a view to avoiding Nyrstar's insolvency.

Simultaneously with the acquisition of the 98 percent stake, the Group granted the 2 percent minority shareholder, Nyrstar N.V. (of which the Group continues to hold 24.4%), with a put option through which the remaining 2 percent can be sold to Trafigura at a strike price of EUR20.0 million. The option has not been exercised as at the date of these financial statements, but remains exercisable until three years after the acquisition date. The transaction is accounted for on the basis that the underlying shares subject to the non-controlling interest (NCI) put option have been acquired.

Assets acquired and liabilities assumed

After finalisation of the acquisition accounting in 2020, the fair values of the identifiable assets and liabilities of Nyrstar as at the date of acquisition were:

	Fair value recognised on acquisition USD'M
Assets	
Property, plant and equipment	1,885.3
Intangible assets	4.7
Equity-accounted investees	0.2
Other investments	25.9
Derivatives	8.6
Deferred tax assets	100.8
Other non-current assets	132.7
Total non-current assets	**2,158.2**
Inventories	792.6
Trade and other receivables	131.7
Derivatives	32.3
Prepayments	27.1
Income tax receivable	1.9
Other current assets	4.9
Cash and cash equivalents	180.2
Total current assets	**1,170.7**
Total assets	**3,328.9**
Liabilities	
Loans and borrowings	(849.8)
Derivatives	(31.9)
Provisions	(308.5)
Deferred tax liabilities	(152.3)
Other non-current liabilities	(19.1)
Total non-current liabilities	**(1,361.6)**
Current tax liabilities	(63.2)
Loans and borrowings	(351.7)
Trade and other payables	(620.6)
Other current liabilities	(450.0)
Total current liabilities	**(1,485.5)**
Total liabilities	**(2,847.1)**
Total identifiable net assets at fair value at acquisition	**481.8**
Goodwill arising on acquisition	64.3
Consideration transferred	**546.1**

F. Notes to consolidated financial statements

The net assets recognised in the 30 September 2019 financial statements were based on a provisional assessment of their fair value predominantly while the Group sought an independent valuation of fixed assets and the Group continued to evaluate certain deferred tax positions. The valuation had not been completed by the date the 2019 financial statements were approved for issue by the Board of Directors.

The main restatements in financial year 2020 to the provisional assessment of the identifiable assets acquired at acquisition result from:

- At acquisition the Nyrstar Group had unused tax losses in Switzerland which were not valued as there was no expectation for the Nyrstar Group to generate sufficient taxable profits to offset against these losses before expiry. During financial year 2020, the Trafigura Group executed an internal reorganisation through which the operation of Nyrstar's purchase and sales requirements of raw material and refined product was integrated into Trafigura's trading operations. As a result of this integration, part of the unused tax losses were transferred to Trafigura where these losses could be recovered against Trafigura's global trading income. As a result, an additional deferred tax asset amounting to USD87.9 million was recognised per acquisition date;
- The finalisation of the fixed assets valuation during financial year 2020 resulting in a downward adjustment to the acquired property, plant and equipment value by USD74.1 million.

The 2019 comparative information was restated to reflect the above and other adjustments to the provisional amounts. As a result, there was a decrease in the property, plant and equipment value of USD74.1 million, an increase in net deferred tax assets of USD43.9 million, reflecting the recognition of the additional deferred tax asset offset by the tax implications of other changes to the provisional amounts, and a net increase in other net identifiable assets by USD7.9 million. There was also a corresponding increase in goodwill of USD22.3 million, resulting in USD64.3 million of total goodwill arising on the acquisition. The impact on the depreciation charge for the period from acquisition to 30 September 2019 resulting from the changes in the valuation of property, plant and equipment was not material.

The goodwill of USD64.3 million comprises the value of expected synergies arising from the acquisition, which is not separately recognised.

Purchase consideration

The Group has issued various instruments to the former Nyrstar noteholders and convertible bondholders as part of the rescue restructuring, under which those Nyrstar noteholders and convertible bondholders exchanged their Nyrstar debt for Trafigura instruments and, which are considered part of the consideration transferred.

Purchase consideration	USD'M
Fair value of issued perpetual securities	270.4
Fair value of issued senior notes	84.2
Fair value of issued commodity-linked Zinc Instrument	154.4
Incentive payments made to former bondholders	14.9
Purchase consideration	**523.9**
Fair value non-controlling interest put option	22.2
Consideration for 100% equity	**546.1**

The USD14.9 million incentive payments relate to EUR13.5 million of fees paid to the former Nyrstar noteholders and convertible bondholders who signed up to the lock up agreement before the end of the early bird period. These fees are considered as part of the consideration. The early bird payments were open to all bondholders.

The Group has reported a financial liability related to the put option equal to the net present value of the redemption amount (i.e., the present value exercise price of EUR20.0 million, equivalent to the USD22.2 million included in the above table). By recognising a liability for the put option over the shares held by the minority shareholder of Nyrstar, no non-controlling interest is recognised by the Group.

Analyses of cash flows on acquisition

The debt restructuring, including the issuance of new debt instruments by Trafigura, was executed without transfer of cash. The cash flows generated upon acquisition are detailed in the below table.

Cash flows on acquisition	USD'M
Transaction costs of the acquisition (included in cash flows from operating activites)	(21.1)
Net cash acquired with the Nyrstar Group (included in cash flows from investing activities)	180.2
Transaction costs attributable to the issuance of the debt instruments (included in cash flows from financing activites)	(2.0)
Net cash flow on acquisition	**157.1**

The Group's transaction costs related to the acquisition of USD21.1 million were expensed and included in other expenses. Transaction costs related to the issuance of the debt instruments of USD2.0 million are capitalised as debt issuance costs and amortised over the maturity of the debt instruments.

7. Deconsolidation of subsidiaries

7.1 Financial year 2020

There were no significant deconsolidations of subsidiaries and non-controlling interest during the financial year ended 30 September 2020.

7.2 Financial year 2019

Sale of WFV27 to Frontline Ltd.

On 23 August 2019, Trafigura Maritime Logistics Pte. Ltd. (TML), a wholly owned subsidiary of the Group, entered into a Sale and Purchase Agreement (SPA) to sell shares in its wholly owned subsidiary White Flag Ventures XXVII Pte. Ltd. (WFV27) to Frontline Ltd. (Frontline). During 2019, and prior to 23 August 2019, WFV27 had taken delivery of 10 Suezmax tankers under lease agreements in the form of long-term bareboat charter agreements (BBC), which were signed during calendar year 2017. All vessels are fitted with exhaust gas cleaning systems. WFV27 subsequently sub-chartered the vessels to TML under long-term time charter (TC) agreements. The primary purpose of WFV27 is to act as charterer and disponent owner under the BBC, and to ensure all services are rendered to enable chartering the vessels out on a TC basis to the principal (TML). WFV27 does not perform any other relevant activities.

In the sale and purchase agreement, it was agreed that Frontline acquires all the shares in WFV27 with the legal transfer taking place subsequently at 16 March 2020. The consideration received by TML in exchange for these shares amounts to 16,035,856 ordinary shares in Frontline, listed on the New York Stock Exchange and the Oslo Stock Exchange.

The USD97.3 million gain resulting from this divestment has been recorded in other income and expense (refer to Note 12). The effect of the divestment and deconsolidation of WFV27 on the Group's consolidated financial statements is as follows:

	2019 USD'M
Fair value of the consideration received	**125.7**
Non-current assets	16.9
Net working capital	8.8
Transaction costs	2.7
Gain resulting from divestment	**97.3**

Sale of entities to Scorpio Tankers Inc.

On 24 September 2019, Trafigura Maritime Logistics Pte. Ltd. (TML), a wholly owned subsidiary of the Group, entered into a sale and purchase agreement to sell shares in its directly owned subsidiaries White Flag Ventures XXV Pte. Ltd., White Flag Ventures XXVI Pte. Ltd. and White Flag Ventures XXIX Pte. Ltd., which have leasehold interests (as lessee under long-term bareboat charter agreements) in 15 Medium Range product tankers and four Long Range coated Aframax (LR2) product tankers, to Scorpio Tankers Inc. Closing of the transaction occurred on 26 September 2019.

The consideration received by TML in exchange for these shares in the above listed White Flag entities amount to 4,572,873 ordinary Scorpio shares, listed on the New York Stock Exchange. The fair value of these shares as per signing of the sale and purchase agreement amounted to USD128.4 million. Additionally, the Group purchased 1,206,896 shares of Scorpio for a total consideration of USD35.0 million resulting in a 9.9 percent stake in Scorpio.

The USD103.5 million gain resulting from this divestment has been recorded in other income and expense (refer to Note 12). The effect of the divestment and deconsolidation of the entities on the Group's consolidated financial statements is as follows:

	2019 USD'M
Fair value of the consideration received	**128.4**
Non-current assets	21.8
Net working capital	(1.3)
Transaction costs	4.4
Gain resulting from divestment	**103.5**

8. Revenue

	2020 USD'M	2019 USD'M
Sales of goods	145,151.0	170,417.4
Rendering of services	1,843.3	1,056.7
Total	**146,994.3**	**171,474.1**

9. General and administrative expenses

	2020 USD'M	2019 USD'M
Depreciation and amortisation	1,136.2	172.0
Staff costs	773.0	613.7
General and other	245.9	263.4
Total	**2,155.1**	**1,049.1**

Refer to Note 10 for a breakdown of depreciation and amortisation. Refer to Note 36 for a breakdown of the staff costs. The category General and other mainly comprises of office, IT, and travelling costs. The expenses increased due the adoption of IFRS16 and the full-year consolidation of Nyrstar.

10. Depreciation and amortisation

	2020 USD'M	2019 USD'M
Depreciation of right-of-use assets	1,018.7	–
Depreciation of property, plant and equipment	300.6	149.6
Amortisation of intangible fixed assets	50.0	51.2
Total	**1,369.3**	**200.8**
Reported under cost of sales	233.1	28.8
Reported under general and administrative expenses	1,136.2	172.0
Total	**1,369.3**	**200.8**

Depreciation and amortisation partially increased as a result of the depreciation on right-of-use assets, and the full year consolidation of Nyrstar. Depreciation related to Nyrstar amounted to USD233.1 million (including USD40.0 million depreciation on right-of-use assets) compared to USD28.8 million in 2019.

Refer to Note 4.1 for details on the adoption of IFRS 16.

11. Impairments

	2020 USD'M	2019 USD'M
Impairments of property, plant and equipment	544.9	49.0
Impairments of right-of-use assets	103.7	–
Impairments of fixed assets	**648.6**	**49.0**
Impairments of financial assets	246.4	2.7
Impairments of prepayments	148.7	17.9
Impairments of financial assets and prepayments	**395.1**	**20.6**
Impairments of equity-accounted investees	524.2	34.6
Impairments of equity-accounted investees	**524.2**	**34.6**
Impairments	**1,567.9**	**104.2**

Investments in Associates and other investments, property, plant and equipment and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable or at least annually for goodwill. If an asset's recoverable amount is less than the asset's carrying amount, an impairment loss is recognised. Loans and receivables are evaluated based on collectability.

F. Notes to consolidated financial statements

Future cash flow estimates which are used to calculate the asset's fair value are based on expectations about future operations primarily comprising estimates about production and sales volumes, commodity prices, operating, rehabilitation and restoration costs and capital expenditures. Changes in such estimates could impact recoverable values of these assets. Estimates are reviewed regularly by management.

Value-in-use is determined as the amount of estimated risk-adjusted discounted future cash flows. For this purpose, assets are grouped into Cash-Generating Units (CGUs) based on separately identifiable and largely independent cash flows. The most recent approved financial budgets and (five-year) business plans are the basis for the future cash flow estimates. The valuation model uses the most recent volume and revenue estimates, relevant costs assumptions based on past experience, and where possible market forecasts of commodity prices. This methodology inherently includes elements of judgement and estimations in relation to projected sales volumes and unit margins. Deterioration or improvement in the volume and pricing outlook may result in additional impairments or reversals. Cash flow estimates are risk adjusted and discounted to reflect local conditions as appropriate.

As a result of the periodic assessment, the following significant impairment charges and fair value adjustments were recorded:

11.1 Financial year 2020

Non-financial assets – Property, plant and equipment

The Group is developing a multimodal supply chain operation in Colombia. The project includes an inland port at Barrancabermeja and fluvial equipment providing multimodal logistics services linking the industrial heartland to the Caribbean ports of Cartagena and Barranquilla via the Magdalena River. These activities will benefit from Colombia's effort to restore long-term navigability of the Magdalena River. However, there is a delay in the dredging and dyking programme as the government is replacing the original construction company which was initially awarded the concession with another. In combination with the COVID-19 pandemic, this resulted in a trigger to perform an impairment test.

To assess a potential impairment, the Colombian project was combined into one CGU as the specific assets do not have independent associated cash flows. The value-in-use calculation includes all aspects of the Colombia multimodal project, and assumes that the Colombian government will award the construction contract at the start of 2021 and that construction will therefore start at the beginning of 2022 increasing the river to a maximum depth by 2026, and a resulting gradual ramp-up of expected revenues and relevant costs. Based on the projections until 2044, which correspond to the current end of the port concession and do not include the expected extension, the estimated recoverable amount is USD491 million. As a result, the Colombian assets were impaired by USD392 million. Further delay in the restoration of the navigability of the Magdalena River may result in additional impairment. The operation specific discount rate in the valuation was 8.5 percent (2019: 7.9 percent).

The sensitivity analyses on the valuations show that an increase/decrease in the discount rate of +/-0.5 percentage has an impact on the recoverable amount of minus USD30 million/plus USD32 million. A change in the EBITDA of 10 percent causes a change of USD61 million to the recoverable amount.

Lower coal prices, a decline in US coal production and related export demand, together with an acceleration of coal-fired power plants coming offline, have resulted in a trigger to perform an impairment test for the Burnside logistics export terminal on the Mississippi river in Louisiana, US.

The identifiable assets were combined into one CGU with independent cash flows to assess the potential impairment. The value-in-use calculation includes projections over the period 2021 up to and including 2025, and results in an estimated recoverable amount of USD94 million. Consequently, the related operational fixed assets were impaired by USD72 million. The valuation remains sensitive to volumes handled and (further) deterioration in the volume outlook may result in additional impairment. The operation specific discount rate in the valuation was 7.0 percent (2019: 7.5 percent).

The sensitivity analyses on the valuations show that an increase/decrease in the discount rate of +/-0.5 percentage points has an impact on the recoverable amount of minus USD9 million/plus USD10 million. A change in the EBITDA of 10 percent causes a change of USD12 million to the recoverable amount.

The remaining impairments on property, plant and equipment (USD80 million) are individually lower than USD35 million each.

Non-financial assets – Right of use assets

The Group has certain ROU assets located in Corpus Christi, Texas, that enable the transportation, storing, processing and vessel loading of crude oil and crude oil products. The global decrease in demand for crude oil (products) as a result of COVID-19 resulted in a trigger to perform an impairment test.

To assess a potential impairment, these ROU assets were determined to be a single CGU. A value-in-use calculation was performed to determine the recoverable amount of the CGU relative to the carrying value of the ROU assets. The value-in-use is calculated based upon the discounted cash flows associated with the CGU using management projections and a discount rate specific to the projected cash flows. Based on the projected discounted cash flows, the recoverable amount was determined to be less than the carrying amount of the ROU assets by USD103.7 million, which was recorded as impairment. The operation specific discount rate in the valuation was 3.0 percent.

The sensitivity analysis on the valuations show that an increase/decrease in the discount rate of +/-0.5 percentage points has an impact on the recoverable amount of minus USD3.4 million/plus USD3.5 million. A change in the EBITDA of 10 percent causes a change of USD47.9 million to the recoverable amount.

Financial assets and prepayments

Other non-current loans receivables include various loans that are granted to counterparties which the Group trades with. This line also includes the debt agreement with the Angolan Ministry of Finance, which relates to compensation for iron ore investments made by the Group following the liquidation of a consolidated Angolan subsidiary in 2016. In 2019, the original debt agreement was renegotiated with a new redemption schedule in place. Due to the current economic situation in Angola, with collapsing oil prices and COVID-19, it has not been possible for the Angolan Ministry of Finance to honour all of its obligations. Currently, the Group is negotiating the terms of the debt agreement again with the Angolan Ministry of Finance.

Under the prepayments category, the Group accounts for the prepayments of commodity deliveries. The contractually outstanding prepayments amount decreases in size with each cargo that is delivered, until maturity. Once the contractually agreed total cargo has been fully delivered, the prepayment agreement falls away leaving no remaining contractual obligations on Trafigura or the supplier.

The global decrease in demand for commodity products as a result of COVID-19 resulted in an increased credit risk towards our suppliers. Therefore the Group has calculated expected credit losses on the outstanding prepayments as from the financial year 2020. The methodology of the expected credit loss calculation is described in Note 3.14.3. The outcome of these calculations amounted to an ECL provision of USD143.8 million.

Equity-accounted investees

The results of the equity accounted investee Tendril Ventures (which indirectly holds a 49 percent equity interest in Nayara Energy Limited) have been negatively impacted by adverse market developments. The negative impact on global energy demand and increased global crude supplies caused refinery margins to tighten, which in turn resulted in a downward adjustment in expected operating performance compared to previous expectations. The carrying amount of the investment exceeded the recoverable amount by USD322.0 million, which has consequently been recognised as an impairment.

The financial performance of Puma Energy Holdings Pte. Ltd. (Puma Energy) continues to be negatively impacted by ongoing uncertainty and varying level of COVID-19 restrictions across its key markets, especially aviation. Although a restructuring of the activities has been started to turn around the performance of its operations, it still results in a trigger to perform an impairment test.

The value-in-use balance was determined using cash flows and discount rates reflecting the specific geographical regions and operations (downstream, infrastructure, bitumen, etc.) in which Puma operates over the projection period 2021 up to and including 2024. As a result, management concluded an impairment of USD191 million was required to reduce the Group's equity investment in Puma Energy to USD1,122 million. The average weighted discount rate in the valuation was 12.5 percent (2019: 10.0 percent).

The sensitivity analyses on the valuations show that an increase/decrease in the discount rate of +/-0.5 percentage points has an impact on the recoverable amount of minus USD131 million/plus USD144 million. A change in the EBITDA of 10 percent causes a change of USD337 million to the recoverable amount.

The Group has an investment in Porto Sudeste do Brasil SA (Porto Sudeste), a Brazilian iron ore port. Tight iron ore supply conditions in Brazil and an uncertain business environment, intensified by the COVID-19 pandemic, resulted in a trigger to perform an impairment test.

The value-in-use balance was determined using the port's discounted cash flow model in which the business plan of Porto Sudeste is reflected. Revenue is calculated over a period ending in 2064 and throughput volumes are held constant from 2029 onwards. As a result, management concluded that the value-in-use (USD84 million) was above the carrying value (USD82 million) and that no impairment was necessary. The annual discount rate in the valuation was 9.6 percent (2019: 7.8 percent).

The sensitivity analysis on this valuation shows that a change in the discount rate by 0.5 percentage points has an impact of minus USD20 million/plus USD17 million on the valuation.

11.2 Financial year 2019

Equity-accounted investees

The financial restructuring and transfer of the Nyrstar operating business in NN2, combined with the dilution of Nyrstar N.V.'s share into NN2 to 2 percent, resulted in a USD 34.3 million impairment of the Group's continuing equity-accounted stake in Nyrstar N.V. to nil.

12. Other income and expense

	2020 USD'M	2019 USD'M
Gain/(loss) on fair value through profit and loss instruments	(128.1)	(114.0)
Release/(additions) to provisions	(55.0)	13.7
Gain/(loss) on foreign exchange	(0.9)	(54.1)
Gain/(loss) on divestment of subsidiaries	(0.8)	198.5
Gain/(loss) from disposal of other investments	–	1.8
Revaluation gain on remeasurement on retained interest	–	0.2
Gain/(loss) on disposal of equity-accounted investees	1.7	(36.0)
Gain/(loss) on disposal of tangible and intangible fixed assets	5.7	(4.2)
Dividend income	7.6	1.6
Other	(26.4)	(75.5)
Total	**(196.2)**	**(68.0)**

12.1 Financial year 2020

Gain/(loss) on fair value through profit and loss instruments

The listed debt securities consist of a financial instrument related to the investment in Porto Sudeste, which is accounted for under equity-accounted investees. These instruments are held to collect cash flows and are designated as fair value through profit and loss, since the payments are dependent on the port's throughput. Since the free float of these listed debt instruments is extremely thin and no active market exists (the value of the average daily traded volume was less than USD500), the fair value is determined using a Level 3 valuation. The fair value of this instrument is based on the port's discounted cash flow model in which the business plan of Porto Sudeste is reflected. Revenue is calculated over a period ending in 2064 and throughput volumes are held constant from 2029 onwards. In this calculation, based on an external assessment, management used an annual discount rate of 12.7 percent (2019: 12.5 percent) per year to calculate a net present value. Due to the limited marketability of the listed securities, a further flat discount factor of 33 percent is applied on the net present value amount (2019: 10 percent). The increase in the flat discount factor reflects the longer time expected to market the securities considering the current market situation.

During the year, the Level 3 valuation of the debt securities resulted in the recognition of a loss of USD124.6 million (2019: loss of USD120.8 million), reducing the valuation of the debt securities to USD220.9 million per 30 September 2020 (2019: USD345.5 million). In addition to the higher discount rate and the limited marketability discount rate, the Level 3 valuation primarily changed as a result of lower and more conservative volume and price projections. This is mainly due to tight iron ore supply conditions in Brazil and an uncertain business environment, intensified by the COVID-19 pandemic. The sensitivity analysis on this valuation shows that an increase/decrease of the port's throughput of 5 percent has an impact of USD9 million (2019: USD15 million) on the valuation, and an increase/decrease of the discount rate by 0.5 percentage points or 50 bps has an impact of USD15 million (2019: USD25 million) on the valuation. A change in the discount rate due to lack of marketability by 5 percentage points or 500 bps has an effect of USD16 million (2019: USD19 million) on the valuation.

F. Notes to consolidated financial statements

The remaining impact of USD3.5 million includes the positive result on the sale of Scorpio Tankers Inc. and Frontline Ltd. shares of USD8.1 million.

Release/additions to provisions

Refer to Note 30 for more details on provisions.

12.2 Financial year 2019

Gain on divestment of subsidiaries

In August 2019, the Group entered into a sale agreement with Frontline for the sale of 10 Suezmax tankers through one of its subsidiaries. In September 2019, the Group also sold through its subsidiaries 15 Medium Range tankers and four LR2 product tankers to Scorpio Shipping Inc. The gain on these transactions amounted USD200.8 million, which is included in gain on divestment of subsidiaries.

Other

Other includes the transaction costs related to the acquisition of NN2, and other components.

13. Income tax

13.1 Tax expense

Income tax expense recognised in the statement of income consists of the following:

	2020 USD'M	2019 USD'M
Current income tax expense	270.5	110.1
Adjustments in relation to current income tax of previous year	(12.7)	(3.4)
Deferred tax expense/(income)	24.3	17.4
Withholding tax in the current year	9.4	0.2
Total	**291.5**	**124.3**

13.2 Tax recognised in other comprehensive income

The tax credit/ charge) relating to components of other comprehensive income is as follows:

	2020 USD'M	2019 USD'M
Tax (expense)/ income on cash flow hedges	18.3	10.7
Total	**18.3**	**10.7**

13.3 Reconciliation of effective tax rate

The Group's operations are subject to income taxes in various foreign jurisdictions. The statutory income tax rate vary between 10 percent and 35 percent, which results in a difference between the weighted average statutory income tax rate and Singapore's statutory tax rate of 17 percent (2019: 17 percent).

The change to the weighted average statutory income tax rate is a consequence of a change in the mix of profits and losses generated in the various countries in which the Group operates. The change to the effective tax rate is a consequence of a change in the mix of taxable profits and losses generated in the various countries in which the Group operates.

The reconciliation between tax expense and the result of accounting profit multiplied by the Group's statutory income tax rate for the years ended 30 September 2020 and 2019 is as follows:

	2020		2019	
	USD'M	%	USD'M	%
Profit before tax	**1,890.3**	**–**	992.1	–
Income tax expense at statutory blended tax rate	**249.9**	**13.2%**	193.8	19.5%
Tax effect of adjustments to arrive at the effective income tax rate:				
Effect of unused tax losses, not recognised as deferred tax assets	**85.2**		39.7	
Non-taxable income or subject to specific tax holidays	**(251.7)**		(160.2)	
Non-deductible expenses	**202.0**		38.7	
Foreign exchange	**6.8**		17.7	
Adjustments in relation to income tax of previous year	**(12.7)**		(3.4)	
Tax rate changes	**2.5**		(2.2)	
Withholding tax	**9.5**		0.2	
Effective tax rate	**291.5**	**15.4%**	124.3	12.5%

13.4 Deferred tax assets and liabilities

The breakdown of deferred tax assets and liabilities in significant components as well as the movement between 1 October 2019 and 30 September 2020 of these components is as follows:

USD'M	Opening Balance	Recongnised income statement	Other Comprehensive Income	FX and Other	Closing Balance	Deferred Tax Assets	Deferred Tax (Liabilities)
Property, plant and equipment	(192.4)	59.7	–	(9.1)	(141.8)	45.6	(187.5)
Investment in subsidiaries and associates	(18.9)	14.7	–	0.0	(4.2)	–	(4.2)
Other temporary differences	(34.6)	38.1	–	7.1	10.6	59.5	(48.9)
Provisions	(129.4)	73.5	–	0.6	(55.2)	0.3	(55.5)
Derivatives	(9.4)	11.4	18.3	(18.1)	2.2	36.0	(33.8)
Tax losses carried forward and tax attributes	319.6	(221.5)	–	5.0	103.1	103.1	–
Total deferred tax position	**(65.1)**	**(24.2)**	**18.3**	**(14.5)**	**(85.5)**	**244.5**	**(329.9)**
Set-off deferred tax positions						(120.2)	120.2
Net Deferred tax position						**124.3**	**(209.7)**

Deferred tax assets are recognised for temporary differences and unused tax losses to the extent that realisation is probable as sufficient taxable profit is expected in the countries where the deferred tax assets are originated. The majority of the reported deferred taxes will be settled after 12 months from the balance sheet date.

No significant deferred tax liability has been recognised in respect of undistributed earnings of subsidiaries. This is because the Group is able to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future.

Unrecognised tax losses carry forward and tax attributes	2020 USD'M
Losses expiring in 2021	4.9
Losses expiring in 2022	120.0
Losses expiring in 2023	21.4
Losses expiring in 2024	19.7
Losses expiring in 2025	371.4
Losses expiring in 2026	869.4
Losses expiring in 2027	–
Losses expiring after 2027	1,174.3
Losses which do not expire	362.8
Total	**2,943.7**

	2019 USD'M
Losses expiring in 2020	17.3
Losses expiring in 2021	241.1
Losses expiring in 2022	796.7
Losses expiring in 2023	93.9
Losses expiring in 2024	188.1
Losses expiring in 2025	476.0
Losses expiring in 2026	138.7
Losses expiring after 2026	1,019.3
Losses which do not expire	166.9
Total	**3,138.0**

The unrecognised deferred tax assets for losses and tax attributes relate to entities for which it is not probable that taxable profit will be available to offset against these losses and attributes.

13.5 Tax uncertainties

The Group operates in numerous jurisdictions worldwide, resulting in cross-border intercompany transactions whereby the transfer pricing rules applied in one country have an impact on the results in another country. In order to reduce transfer pricing uncertainties, transfer pricing studies are performed and reports are prepared to fulfil local transfer pricing requirements. Due to the complexity of tax rules, interpretation by local taxing authorities can differ from the Group's interpretation based on opinions provided by local tax counsel. The Group believes that it has sufficiently provided for financial consequences (if any).

In countries where the Group starts new operations or alters business models, the issue of permanent establishment and profit allocation thereto may arise. The risk is that taxing authorities in multiple jurisdictions claim taxation rights over the same profit.

F. Notes to consolidated financial statements

14. Property, plant and equipment

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Mine property and development	Other fixed assets	Total
Cost						
Balance at 1 October 2019	**1,231.1**	**2,206.5**	**629.7**	**37.1**	**838.6**	**4,943.0**
Additions	17.9	58.6	58.0	20.7	275.1	430.3
Reclassifications	35.4	84.6	12.1	6.3	(183.7)	(45.3)
Effect of movements in exchange rates, including hyperinflation adjustment	2.2	78.9	–	(2.4)	10.9	89.6
Disposals	(5.9)	(47.3)	(116.9)	–	(40.3)	(210.4)
Divestment of subsidiaries	–	–	–	–	(53.2)	(53.2)
Balance at 30 September 2020	**1,280.7**	**2,381.3**	**582.9**	**61.7**	**847.4**	**5,154.0**
Depreciation and impairment losses						
Balance at 1 October 2019	**301.9**	**334.7**	**173.0**	**1.8**	**257.5**	**1,068.9**
Depreciation for the period	48.8	172.4	33.9	10.2	35.3	300.6
Impairment losses	134.2	249.5	121.0	–	24.6	529.3
Reclassifications	–	(2.9)	(2.6)	(6.5)	(1.5)	(13.5)
Effect of movements in exchange rates, including hyperinflation adjustment	(8.1)	3.2	–	–	(1.4)	(6.3)
Disposals	(3.6)	(46.6)	(53.7)	–	(20.1)	(124.0)
Divestment of subsidiaries	–	–	–	–	(31.2)	(31.2)
Balance at 30 September 2020	**473.2**	**710.3**	**271.6**	**5.5**	**263.2**	**1,723.8**
Net book value at 30 September 2020	**807.5**	**1,671.0**	**311.3**	**56.2**	**584.2**	**3,430.2**

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Mine property and development	Other fixed assets	Total
Cost						
Balance at 1 October 2018	**883.8**	**712.3**	**611.3**	**–**	**611.6**	**2,819.0**
Additions	10.0	58.9	28.8	4.8	125.3	227.8
Business combination remeasurements	245.2	1,455.7	–	24.1	160.3	1,885.3
Reclassifications	98.9	8.3	27.6	8.5	(33.5)	109.8
Effect of movements in exchange rates, including hyperinflation adjustment	10.0	(16.3)	–	(0.3)	(5.5)	(12.1)
Disposals	(19.3)	(12.4)	–	–	(18.5)	(50.2)
Divestment of subsidiaries	2.5	–	(38.0)	–	(1.1)	(36.6)
Balance at 30 September 2019	**1,231.1**	**2,206.5**	**629.7**	**37.1**	**838.6**	**4,943.0**
Depreciation and impairment losses						
Balance at 1 October 2018	**256.5**	**279.3**	**141.9**	**–**	**241.2**	**918.9**
Depreciation for the period	42.8	48.9	35.5	1.8	20.6	149.6
Impairment losses	6.6	12.5	–	–	9.5	28.6
Reclassifications	7.2	(0.7)	(4.4)	–	–	2.1
Effect of movements in exchange rates, including hyperinflation adjustment	(4.3)	(0.7)	–	–	0.1	(4.9)
Disposals	(7.6)	(4.6)	–	–	(13.3)	(25.5)
Divestment of subsidiaries	0.7	–	–	–	(0.6)	0.1
Balance at 30 September 2019	**301.9**	**334.7**	**173.0**	**1.8**	**257.5**	**1,068.9**
Net book value at 30 September 2019	**929.2**	**1,871.8**	**456.7**	**35.3**	**581.1**	**3,874.1**

14.1 Financial year 2020

The total addition for the year amounted to USD430.3 million, which mainly relates to investments in the Nyrstar industrial facilities of USD279.1 million (which was primarily maintenance expenditure) and in vessels of USD58.0 million, and in various smaller individual projects. Disposals amounted to USD86.3 million, mainly related to the sale of vessels that were subsequently leased back.

Included in the Other fixed assets category are assets under construction, which relates to assets not yet in use, and some Nyrstar related assets. Net book value as at 30 September 2020 amounted to USD449.0 million (30 September 2019: USD340.6 million). Once the assets under construction come into operation they are reclassified to the appropriate asset category and from that point they are depreciated.

Certain items of property, plant and equipment are pledged as collateral for an amount of USD250.1 million (30 September 2019: USD342.8 million).

Depreciation is included in depreciation and amortisation. Impairment charges are separately disclosed in the income statement.

Reference is made to Note 11 for details on impairments.

During the financial year ended 30 September 2020, the Group capitalised borrowing cost of a total amount of USD nil under other fixed assets (30 September 2019: USD6.0 million).

14.2 Financial year 2019

The total additions during financial year 2019 amounted to USD227.8 million. The main investments during 2019 relate to ongoing investments in Nyrstar's smelters and equipment of USD46.4 million, the purchase of scrubbers and shipping equipment of USD28.0 million, construction in progress of a splitter unit in Mexico of USD31.5 million, construction in progress of a new storage facility in Mexico of USD18.1 million, and construction in progress of a new terminal facility in North America of USD12.0 million. The remaining investments relate to various smaller projects.

The acquisitions through business combinations totalling USD1,959.4 million are related to the acquisition of NN2, as disclosed in Note 6. Reclassifications include an amount of USD65.5 million related to assets that were previously presented as non-current assets held for sale.

Reference is made to Note 11 for details on impairments.

The net disposals for the year amounted to USD23.7 million and mainly relate to the sale of a mine in Peru (USD14.9 million). The USD36.6 million in divestments of subsidiaries is mainly related to the Frontline and Scorpio transactions as disclosed in Note 7.

The majority of the of the balance in the Other fixed asset category relates to assets under construction which are assets not yet in use. Assets under construction at 30 September 2019 amounted to USD340.6 million. The main projects currently in progress relate to the construction of a power plant in Ghana (USD99.5 million) and the construction of a splitter unit in Mexico (USD118.3 million). In addition, the Other fixed asset category includes small equipment, computer hardware, office equipment and refurbishments.

The net book value of property, plant and equipment acquired under finance leases at 30 September 2019 was USD13.2 million.

Certain items of property, plant and equipment are pledged as collateral for an amount of USD342.8 million.

Depreciation expenses are included in general and administrative expenses. Impairment charges are included in other income and expense.

During the financial year ended 30 September 2019, the Group capitalised borrowing cost of a total amount of USD6.0 million under other fixed assets.

F. Notes to consolidated financial statements

15. Intangible fixed assets

USD'M	Goodwill	Licences	Other intangible assets	Total
Cost				
Balance at 1 October 2019	**70.2**	**27.7**	**450.2**	**548.1**
Additions	–	–	60.2	60.2
Reclassifications	–	–	1.2	1.2
Effect of movements in exchange rates, including hyperinflation adjustment	–	(2.1)	0.1	(2.0)
Disposals	–	–	(0.1)	(0.1)
Divestment of subsidiaries	–	–	–	–
Balance at 30 September 2020	**70.2**	**25.6**	**511.6**	**607.4**
Amortisation and impairment losses				
Balance at 1 October 2019	**–**	**20.4**	**315.7**	**336.1**
Amortisation for the period	–	0.2	49.9	50.1
Impairment	5.9	5.0	2.4	13.3
Effect of movements in exchange rates, including hyperinflation adjustment	–	(2.1)	(0.3)	(2.4)
Reclassifications	–	–	0.1	0.1
Disposals	–	–	(0.1)	(0.1)
Divestment of subsidiaries	–	–	–	–
Balance at 30 September 2020	**5.9**	**23.5**	**367.7**	**397.1**
Net book value at 30 September 2020	**64.3**	**2.1**	**143.9**	**210.3**

USD'M	Goodwill	Licences	Other intangible assets	Total
Cost				
Balance at 1 October 2018	**8.1**	**32.0**	**407.3**	**447.4**
Additions	–	–	44.2	44.2
Acquired through business combination	64.3	–	4.7	69.0
Reclassifications	(2.2)	–	1.8	(0.4)
Effect of movements in exchange rates, including hyperinflation adjustment	–	(3.1)	0.8	(2.3)
Disposals	–	(1.2)	(3.1)	(4.3)
Divestment of subsidiaries	–	–	(5.5)	(5.5)
Balance at 30 September 2019	**70.2**	**27.7**	**450.2**	**548.1**
Amortisation and impairment losses				
Balance at 1 October 2018	**2.2**	**2.0**	**269.8**	**274.0**
Amortisation for the period	–	0.2	51.0	51.2
Impairment	–	19.4	1.0	20.4
Effect of movements in exchange rates, including hyperinflation adjustment	–	–	(0.4)	(0.4)
Reclassifications	(2.2)	–	1.9	(0.3)
Disposals	–	(1.2)	(3.1)	(4.3)
Divestment of subsidiaries	–	–	(4.5)	(4.5)
Balance at 30 September 2019	**–**	**20.4**	**315.7**	**336.1**
Net book value at 30 September 2019	**70.2**	**7.3**	**134.5**	**212.0**

Goodwill is the only intangible asset with an indefinite life. All other intangible assets are amortised as follows:

- Licence fees paid are amortised evenly over their respective periods, for which the licences have been granted, generally not exceeding 10 years;
- Other intangible assets are amortised evenly over their estimated useful economic life. Other intangibles mainly consist of software of USD141.3 million (2019: USD120.5 million) which is amortised over five years, and payments made under exclusivity contracts with clients for petroleum fuels and lubricants which are amortised over the contractual period.

Amortisation expenses is included in depreciation and amortisation. Impairment charges are separately disclosed in the income statement. Intangible assets with finite lives are tested for impairment when impairment indicators exist. For the purpose of impairment testing, goodwill is allocated to the CGUs or groups of CGUs.

15.1 Impairment test on goodwill

The goodwill balance of USD64.3 million originates from the acquisition of the Nyrstar Group as disclosed in Note 6. The group performs a goodwill impairment test on an annual basis. For the 2020 reporting period, the recoverable amount of the CGUs was determined based on value-in-use calculations using real-term cash flow projections from approved financial budgets and consumption/production plans covering a five-year period.

For impairment, the carrying amount of goodwill is allocated to three CGUs. The below table includes the allocation of the goodwill carrying amount and the pre-tax discount rate applied to the real-term cash flow projections.

Cash generating unit (CGU)	Goodwill USD'M	Pre-tax discount rate
Nyrstar – Europe	48.0	7.7%
Nyrstar – Australia	14.1	8.1%
Nyrstar – United States of America	2.2	7.9%
	64.3	

As the recoverable amount significantly exceeded the recorded goodwill for all CGUs, no impairment has been recognised.

Key assumptions used in value in use calculations and sensitivity to changes in assumption

The calculation of value-in-use for all of the above CGUs is sensitive to a number of assumptions, including the following:

- Discount rates;
- Foreign exchange rates;
- Physical forward prices for (precious) metals;
- Treatment charges.

Discount rates – discount rates represent the current market assessment of the risks specific to each CGU, taking into consideration individual risks of the underlying assets that have not been incorporated in the cash flow estimates. The discount rate calculation is based on the specific circumstances of the Group and the Nyrstar operations and is derived from its weighted average cost of capital (WACC). The WACC takes into account both debt and equity. The cost of equity is derived from the expected return on investment by the Group's investors. The cost of debt is based on the interest-bearing borrowings the Group is obliged to service. Nyrstar-specific risk is incorporated by applying individual beta factors. The beta factors are evaluated annually based on publicly available market data.

An increase in the pre-tax discount rate by 0.5 percent would reduce the recoverable amounts by USD128.9 million for Europe, USD86.4 million for Australia and USD31.6 million for the US, and in all CGUs still provide for significant headroom.

Foreign exchange rates / Physical forward prices for (precious) metals / Treatment charges (TCs) – estimates are obtained from internal research, as well as from external data. The sensitivity of the recoverable amount when prices of (precious) metals, benchmark TCs or foreign exchange rates increase or decrease on average by 5 percent is as follows:

Cash generating unit (CGU)	Metal prices +5% USD'm	Metal prices -/- 5% USD'm	Fx rates +5% USD'm	Fx rates -/- 5% USD'm	Benchmark TCs +5% USD'm	Benchmark TCs -/- 5% USD'm
Nyrstar – Europe	244.0	(243.9)	(348.6)	348.9	219.1	(219.0)
Nyrstar – Australia	253.5	(253.5)	(307.3)	307.4	108.1	(108.1)
Nyrstar – United States of America	106.8	(106.8)	3.6	(3.9)	16.7	(16.7)
	604.3	**(604.2)**	**(652.3)**	**652.4**	**343.9**	**(343.8)**

F. Notes to consolidated financial statements

16. Leases

The Group leases various assets, including land and buildings and plant and equipment. Leases are negotiated on an individual basis and contain a wide range of different terms and conditions, including termination and renewal rights. The Group, as a lessor, only has finance leases.

The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

16.1 Right-of-use assets

USD'M	30 September 2020	1 October 2019
Freight	1,382.7	1,366.2
Storage rentals	92.7	158.3
Office rent	85.7	106.6
Other	530.4	936.6
Total	**2,091.5**	**2,567.6**

USD'M	Freight	Storage rentals	Office rent	Other	Total
Balance at 1 October 2019	1,366.2	158.3	106.6	936.6	2,567.6
Additions/ remeasurements	642.5	22.1	3.2	16.4	684.2
Disposals	(21.7)	(1.5)	(5.6)	–	(28.8)
Impairment	–	(9.6)	–	(94.2)	(103.8)
Depreciation	(604.6)	(92.8)	(20.4)	(300.9)	(1,018.7)
Effect of movement in exchange rate	–	1.3	2.3	0.8	4.4
Other	0.3	14.9	(0.4)	(28.3)	(13.5)
Balance at 30 September 2020	**1,382.7**	**92.7**	**85.7**	**530.4**	**2,091.4**

The Other category mainly includes assets located in Corpus Christi, Texas, that enable the transportation, storing, processing and vessel loading of crude oil and crude oil products.

16.2 Lease receivables

The following table sets out a maturity analysis of lease receivables at 30 September 2020, showing the undiscounted lease payments to be received:

	2020 USD'M
Less than one year	43.7
Later than one year and less than five years	132.6
Later than five years	–
Total undiscounted lease receivables as at 30 September 2020	**176.3**
Unearned finance income	(14.8)
Lease receivables included in the statement of financial position	**161.5**
Of which are:	
Current	**37.4**
Non-current	**124.1**

The lease payments are evenly distributed over the remaining period.

16.3 Lease liabilities

The following table sets out a maturity analysis of the lease liabilities at 30 September 2020, indicating the undiscounted lease amounts to be paid:

	2020 USD'M
Less than one year	1,065.0
Later than one year and less than five years	1,216.4
Later than five years	367.0
Total undiscounted lease payable as at 30 September 2020	**2,648.4**
Future finance costs	(259.4)
Lease liabilities included in the statement of financial position	**2,389.0**
Of which are:	
Current	**981.6**
Non-current	**1,407.4**

USD'M	Freight	Storage rentals	Office rent	Other	Total
Balance at 1 October 2019	1,563.5	158.3	106.6	936.6	2,764.9
Interest	73.1	6.1	4.8	30.7	114.7
Additions/ remeasurements	648.3	22.1	3.2	16.3	689.9
Disposals	(21.7)	(1.5)	(5.6)	–	(28.8)
Payments	(707.4)	(96.7)	(22.0)	(313.1)	(1,139.2)
Effect of movement in exchange rate	–	1.4	2.4	0.9	4.7
Other	(0.7)	14.0	(0.1)	(30.5)	(17.3)
Balance at 30 September 2020	**1,555.1**	**103.7**	**89.3**	**640.9**	**2,389.0**
Current	596.1	84.9	17.1	283.5	981.6
Non-current	959.9	18.8	71.4	357.4	1,407.5
Balance at 30 September 2020	**1,556.0**	**103.7**	**88.5**	**640.9**	**2,389.1**

16.4 Amounts relating to leases recognised for the reporting period

The following amounts are recognised in profit and loss:

	2020 USD'M
Depreciation on ROU assets	1,018.7
Interest expense on lease liabilities	114.7
Impairments of right-of-use assets	103.7
Expenses relating to short-term leases	102.8
(Income) from subleasing ROU assets	(7.9)
Gain or losses on sale and leaseback	9.5
Foreign exchange/ other	1.6
Net (income)/ expenses related to leases	**1,343.1**

Reference is made to Note 4.1.3 for the impact of the adoption of IFRS 16 on the income statement.

At 30 September 2020, the Group is committed to USD 201 million of short-term lease payments.

The following amounts are recognised with regard to lease liabilities and lease receivables together in the cash flow statement:

	2020 USD'M
Cash outflow for leases – included in net cash from/(used in) operating activities	(107.1)
Cash outflow for leases – included in net cash from/(used in) financing activities	(993.0)
Total	**(1,100.1)**

F. Notes to consolidated financial statements

17. Equity-accounted investees

	2020 USD'M	2019 USD'M
Opening balance	3,416.5	3,361.2
Acquisition through business combination	–	0.2
Effect of movements in exchange rates	(121.7)	(37.7)
Additions	94.5	85.6
Fair value of retained interest in deconsolidated subsidiaries	–	0.2
Disposals	(27.1)	(0.7)
Impairments	(524.2)	(34.6)
Share of net profit/(loss)	(327.0)	47.7
Dividends received	(4.9)	(18.6)
Other	(67.5)	13.2
Total	**2,438.6**	**3,416.5**

17.1 Financial year 2020

The effect of movements in exchange rates of USD121.7 million includes a negative foreign currency translation impact from Puma Energy Holdings Pte. Ltd. (Puma Energy) of USD83.0 million and a negative foreign currency translation impact of USD22.9 million from Tendril Ventures Pte. Ltd. (Tendril Ventures), which indirectly holds shares in Nayara Energy Limited. This foreign exchange movement is included in the other comprehensive income line share of comprehensive income/ (loss) from associates.

Puma Energy agreed to a shareholding restructuring transaction with Trafigura and Cochan Holdings. Cochan Holdings reduced its stake in Puma Energy from 15 percent to less than 5 percent, by selling shares in Puma Energy to Trafigura. Hereafter, Puma Energy bought back and cancelled these shares. Puma Energy funded the re-purchase with a subordinated shareholder loan from Trafigura with an initial tenor of seven years. The parties completed the transaction in June 2020. As a result of this transaction, Trafigura's shareholding in Puma Energy increased to 55.5 percent.

Based on agreement between the shareholders, the power to direct the relevant activities of Puma Energy lies solely with its Board of Directors, and shareholders' rights are only protective in nature. Trafigura appoints three out of eight directors, and decisions by Puma Energy's Board of Directors are taken by simple majority. Trafigura therefore does not have the majority of decision-making power in the Board of Directors. The transaction did not alter the existing shareholder agreement. Therefore, the increase in Trafigura's shareholding did not result in Trafigura gaining control over Puma Energy. Consequently, the equity investment in Puma Energy will continue to be accounted for under the equity method.

During 2020, the additions to equity-accounted investees amounted to USD94.5 million. In the financial year, the Group participated for its share in an equity contribution in Tendril Ventures resulting in an additional investment of USD44.3 million. Other main additions relate to a new investment in a natural gas and power company focusing on the Italian market of USD11.4 million and an investment in Bluewater Texas Terminals of USD22.6 million.

The share of net loss from investments amounts to USD327.0 million. This is predominantly the result of losses in Puma Energy (USD326.1 million) and Porto Sudeste do Brasil (USD46.6 million), partly offset by profits from MATSA, Guangxi Jinchuan and Impala Terminals Group Sarl (previously Simba) of USD37.8 million. The carrying value of the equity investment in Puma Energy amounted to USD1,122 million as at 30 September 2020.

During the financial year 2020 there have been negative market developments in the economic environment in which some of our equity-accounted investees operate. This has resulted in impairments on our investments in Puma Energy Holding Pte Ltd and Tendrill Ventures (Nayara). Details of the impairment analysis are disclosed in Note 11.

Other reductions predominately include the negative movements on cash flow hedges of equity-accounted investees, including USD23 million relating to Puma Energy.

17.2 Financial year 2019

The additions to equity-accounted investees amounted to USD85.6 million, consisting mainly of additional investments in Tendril Ventures Pte. Ltd. (Tendril Ventures), which indirectly holds shares in Nayara Energy Limited, of USD41.5 million, and an additional capital contribution in Porto Sudeste do Brasil (Porto Sudeste) of USD8.5 million.

The effect of movements in exchange rates of USD37.7 million includes a negative foreign currency translation impact from Puma of USD128.6 million, partly offset by a positive foreign currency translation impact of USD99.8 million from Tendril Ventures. This foreign exchange movement is included in the other comprehensive income line exchange gain/ (loss) on translation of foreign operations.

Reference is made to Note 9 for details on impairments.

The Group's share of results in its equity-accounted investees for the year amounted to a gain of USD47.7 million. This result includes the positive share in the income of TM Mining Ventures, S.L. (MATSA), Porto Sudeste, Guangxi Jinchuan Non-ferrous Metals Co. Ltd. (Guangxi Jinchuan), Empresa Minera del Caribe S.A. (Emincar) and Impala Terminals Holding S.à r.l. (Simba) of USD143.9 million and losses in Puma and Tendril Ventures of USD97.9 million. The Group's share of results of Porto Sudeste was a profit of USD71 million, which arose mainly from a reduction in value of Porto Sudeste's listed debt securities (which resulted in a gain in Porto Sudeste's statement of income) as a result of considering a longer ramp-up period for the port's throughput volume, which is mainly the result of tight iron ore supply conditions in Brazil. The USD71 million was more than offset by a loss of USD120.8 million from the decrease in value of the listed port securities, which the Group holds as a further investment in Porto Sudeste.

Other predominately includes the positive movements on cash flow hedges of equity-accounted investees. In 2019, the Group received dividends of USD18.6 million from its investments in equity-accounted investees (2018: USD50.4 million). The full amount relates to dividends from MATSA.

17.3 Equity-accounted investee related balances and participations

The tables below depicts balances and participations related to equity-accounted investees:

Name	Place of incorporation/ registration	Activities	Percentage of equity attributable to the Group 2020	2019
Atalaya Mining PLC	Cyprus	Mining	**22.4%**	22.4%
Bluewater Texas Terminals LLC (BWTT)	United States	Terminal	**50.0%**	0.0%
Empresa Minera del Caribe S.A. (Joint venture)	Caribbean	Mining	**49.0%**	49.0%
Guangxi Jinchuan Non-ferrous Metals Co., Ltd	China	Smelter	**30.0%**	30.00%
Impala Terminals Group S.à r.l. (Simba) (Joint venture)	Luxembourg	Multimodal logistics and warehousing	**50.0%**	50.00%
Minas de Aguas Tenidas, S.A. (MATSA) (2019: TM Mining Ventures, S.L. (Joint venture))	Spain	Mining	**50.0%**	50.00%
Mineração Morro do Ipê S.A. (Joint venture)	Brazil	Mining	**50.0%**	40.31%
Nyrstar N.V.*	Belgium	Formerly Mining, Metal processing	**24.4%**	24.42%
Porto Sudeste do Brasil S.A. (Joint venture)	Brazil	Port services	**49.6%**	49.47%
Puma Energy Holdings Pte. Ltd.	Singapore	Mid- and downstream oil activities	**55.5%**	49.29%
Tendril Ventures Pte Ltd	Singapore	Oil refinery, terminal and retailing of fuel	**49.8%**	49.75%
Transportadora Callao S.A.	Peru	Transportation	**30.0%**	30.00%

Name	Segment	2020 USD'M	2019 USD'M
Oil and Petroleum:			
Puma Energy Holdings Pte. Ltd.	Oil and Petroleum	**1,122.0**	1,745.3
Tendril Ventures Pte Ltd	Oil and Petroleum	**89.0**	426.4
Others	Oil and Petroleum	**28.9**	24.7
Total		**1,239.9**	2,196.4
Metals and Minerals:			
Minas de Aguas Tenidas, S.A. (MATSA)	Metals and Minerals	**459.8**	451.7
Impala Terminals Group S.à r.l. (Simba)	Metals and Minerals	**274.6**	269.1
Guangxi Jinchuan Non-ferrous Metals Co., Ltd	Metals and Minerals	**178.7**	170.6
Atalaya Mining PLC	Metals and Minerals	**95.4**	84.0
Porto Sudeste do Brasil S.A.	Metals and Minerals	**81.7**	121.6
Empresa Minera del Caribe S.A.	Metals and Minerals	**39.7**	43.3
Mineração Morro do Ipê S.A.	Metals and Minerals	**23.8**	23.4
Others	Metals and Minerals	**14.2**	24.9
Nyrstar N.V.*	Metals and Minerals	**–**	–
Total		**1,167.9**	1,188.6
All other segments:			
Others	Corporate and others	**30.8**	31.5
Total		**2,438.6**	3,416.5

* Listed investments. Fair value as of 30 September 2020 (and 2019):

Atalaya Mining PLC (previously known as EMED Mining Public Limited)	65.6	75.1
Nyrstar N.V.	3.5	6.2

F. Notes to consolidated financial statements

Only the individually significant associates Puma Energy Holdings Pte. Ltd., Minas de Aguas Tenidas, S.A. (MATSA) and Impala Terminals Group S.à r.l. (Simba) are shown separate from the other associates.

	Puma Energy Holdings Pte. Ltd.		Minas de Aguas Tenidas, S.A. (MATSA)		Impala Terminals Group S.à r.l.	
	2020	2019	**2020**	2019	**2020**	2019
	USD'M	USD'M	**USD'M**	USD'M	**USD'M**	USD'M
Non-current asset assets	**3,409.7**	4,022.1	**1,472.4**	1,517.0	**506.6**	309.1
Current assets	**2,257.5**	2,856.0	**120.1**	171.2	**178.6**	134.9
Non-current liabilities	**2,751.6**	2,863.0	**386.3**	463.0	**222.6**	22.0
Current liabilities	**3,296.0**	3,023.9	**286.5**	321.8	**120.9**	98.5
Revenue	**12,980.1**	17,335.8	**496.6**	544.4	**477.4**	312.7
Profit/(loss) for the year	**(691.2)**	(499.1)	**14.6**	29.9	**17.6**	41.9
Dividends paid	**–**	–	**–**	(62.5)	**–**	–
Other comprehensive income	**(228.7)**	(224.6)	**1.6**	2.2	**(6.4)**	(0.1)
Total comprehensive income	**(919.8)**	(723.7)	**16.2**	32.1	**11.2**	41.8
Net assets	**(380.4)**	991.3	**919.7**	903.4	**341.7**	323.6
Trafigura's ownership interest	**55.5%**	49.3%	**50.0%**	50.0%	**50.0%**	50.0%
Fair value adjustment as a result of partial sale and other adjustments	**1,333.3**	1,256.7	**(0.0)**	(0.0)	**103.9**	107.3
Carrying value	**1,122.0**	1,745.3	**459.8**	451.7	**274.7**	269.1

Other associates	**2020** USD'M	2019 USD'M
Assets	**4,048.9**	4,616.4
Liabilities	**3,552.9**	3,868.2
Revenue	**1,420.6**	2,557.8
Profit for the year (excluding 2019 Nyrstar results, see below)	**(57.9)**	76.8

The Group's share in profit for 2019 amounted to USD76.8 million, as disclosed in the table above, excludes the losses of Nyrstar N.V. The continuing investment in Nyrstar N.V. has been fully impaired, therefore the valuation of the equity-accounted investee is nil. Since the valuation of the equity-accounted investee cannot be reduced below nil, the Group's share in the Nyrstar N.V. loss is not included in the share of profit/ (loss) from equity-accounted investees in the statement of income. As from 2020, the profit and loss of Nyrstar N.V. has been included under other associates (nil impact).

The amount of corporate guarantees in favour of associates and joint ventures as at 30 September 2020 was USD124.7 million (30 September 2019: USD130.5 million).

18. Prepayments

	2020 USD'M	2019 USD'M
Current	**2,934.7**	3,454.4
Non-current	**1,060.8**	678.8
Total	**3,995.5**	4,133.2

Prepayments relate to prepayments of commodity deliveries and are split into non-current prepayments (due > 1 year) and current prepayments (due < 1 year). A significant portion of the non-current prepayments, as well as current prepayments, are either financed on a non-recourse basis or insured.

Under the prepayments category, the Group accounts for the prepayments of commodity deliveries. Out of the total current prepayments balance, an amount of USD0.7 billion (30 September 2019: USD0.7 billion) relates to prepayments which are made for specifically identified cargos.

The contractually outstanding prepayments amount decreases in size with each cargo that is delivered, until maturity. Once the contractually agreed total cargo has been fully delivered, the prepayment agreement falls away leaving no remaining contractual obligations on Trafigura or the supplier.

The Group monitors the commodity prices in relation to the prepayment contracts and manages the credit risk together with its financial assets as described in Note 35. A portion of the long-term prepayments, as well as short-term prepayments, is on a limited recourse basis. Interest on the prepayments is added to the prepayment balance.

The global decrease in demand for commodity products as a result of COVID-19 resulted in an increased credit risk towards our suppliers. Therefore the Group has calculated expected credit losses on the outstanding prepayments as from the financial year 2020. The methodology of the expected credit loss calculation is similar to the methodology used in the expected credit loss calculations on loans receivable.

Based upon the individual analysis of the prepayments, the Group recorded expected credit losses on these prepayments amounting to USD143.8 million (30 September 2019: nil). The following table explains the movements of the expected credit loss between the beginning and the end of the year and the gross carrying amounts of the prepayments by credit risk category.

Prepayments	2020 Performing 12-months ECL USD'M	2020 Under performing Life time ECL USD'M	2020 Total USD'M
Expected credit loss (ECL) provision			
Opening balance – 1 October	–	–	**–**
Transfer to under-performing	–	–	**–**
ECL on prepayments recognised during the period	40.3	103.5	**143.8**
ECL on prepayments derecognised during the period	–	–	**–**
Changes in PD/LGD/EAD	–	–	**–**
Closing balance 30 September	40.3	103.5	**143.8**
Carrying amount 30 September			
Current	1,553.9	1,380.8	**2,934.7**
Non-current	688.9	371.9	**1,060.8**
Total	2,242.8	1,752.7	**3,995.5**

19. Loans and other receivables

	2020 USD'M	2019 USD'M
Loans to associates and related parties	**453.2**	287.1
Other non-current loans receivable	**241.2**	234.3
Total	**694.4**	521.4

Loans to associates and related parties includes a loan receivable from Puma Energy Holding Pte. Ltd. of USD390 million, which relates to the funding of a buy back and subsequent cancelation of shares by Puma Energy Holding Pte Ltd from one of its shareholders. Furthermore, this line includes a loan to a Galena investment fund of USD38.7 million, which relates to their investment in a Canadian mine.

Other non-current loans receivables include various loans which are granted to counterparties that the Group trades with. This line also includes the debt agreement with the Angolan Ministry of Finance, which relates to compensation for iron ore investments made by the Group following the liquidation of a consolidated Angolan subsidiary in 2016. In 2019, the original debt agreement was renegotiated, with a new redemption schedule in place. Due to the current economic situation in Angola, with collapsing oil prices and COVID-19, it has not been possible for the Angolan Ministry of Finance to honour all of its obligations. Currently, the Group is negotiating the terms of the debt agreement again with the Angolan Ministry of Finance.

Based upon the individual analysis of these loans, the recorded expected credit losses on these loans amounts to USD121.9 million (30 September 2019: USD7.1 million). The following table explains the movements of the expected credit loss between the beginning and the end of the year and the gross carrying amounts of the loan receivables by credit risk category.

Loan Receivables	2020 Performing 12-months ECL USD'M	2020 Under performing Life time ECL USD'M	2020 Total USD'M	2019 Performing 12-months ECL USD'M	2019 Under performing Life time ECL USD'M	2019 Total USD'M
Expected credit loss (ECL) provision						
Opening balance – 1 October	**2.6**	**4.5**	**7.1**	2.0	2.6	4.6
Transfer to under-performing	**(2.6)**	**2.6**	**–**	–	–	–
New loans originated during the period	**4.2**	**3.3**	**7.5**	0.9	–	0.9
Changes in PD/LGD/EAD	**0.3**	**107.0**	**107.3**	(0.3)	1.9	1.6
Closing balance 30 September	**4.6**	**117.4**	**121.9**	**2.6**	**4.5**	**7.1**
Carrying amount 30 September						
Current (Note 23)	**302.8**	**–**	**302.8**	430.9	93.8	524.7
Non-current (Note 19)	**393.9**	**300.5**	**694.4**	341.2	180.2	521.4
Total	**696.7**	**300.5**	**997.2**	772.1	274.0	1,046.1

F. Notes to consolidated financial statements

20. Other investments

Investments included in the balance sheets per 30 September 2020 and 2019 can be broken down as follows:

	2020 USD'M	2019 USD'M
Listed equity securities – fair value through OCI	**3.9**	28.8
Listed equity securities – fair value through profit or loss	**25.3**	342.1
Listed debt securities – fair value through profit or loss	**220.9**	345.5
Unlisted equity investments – fair value through profit or loss	**34.3**	53.9
Unlisted equity investments – fair value through OCI	**232.7**	233.4
Total	**517.1**	1,003.7

The Group's long-term investments consist of listed equity securities, listed debt securities and unlisted equity securities. The listed equity securities have no fixed maturity or coupon rate. The fair values of listed equity investments are based on quoted market prices, while the fair value of the unlisted equity securities is determined based on a Level 3 valuation as prepared by management.

The decrease in the listed equity securities (fair value through profit or loss) is primarily resulting from the sale of the Scorpio Tankers Inc. and Frontline Ltd. shares.

The decrease in listed debt securities (fair value through profit or loss) mainly results from the financial instruments related to the investment in Porto Sudeste do Brasil SA. For more details refer to Note 12.

21. Other non-current assets

	2020 USD'M	2019 USD'M
Non-financial hedged items	**76.9**	216.5
Restricted cash	**68.0**	106.9
Others	**47.1**	32.9
Total	**192.0**	356.3

For further information on the non-financial hedged items, refer to Note 35.8. The restricted cash balance mainly represents amounts placed on deposit to cover certain reclamation costs for Nyrstar mining operations.

22. Inventories

Carrying amount	2020 USD'M	2019 USD'M
Storage inventories	**13,670.1**	8,344.3
Floating inventories	**6,103.6**	4,893.1
Work-in-progress inventories	**391.2**	185.0
Supplies	**12.7**	12.6
Total	**20,177.6**	13,435.0

As at 30 September 2020 (and 30 September 2019), the entire inventory has either been pre-sold or hedged. Part of the inventory has been pledged for securitisation purposes. Refer to Note 24.2.

Work-in-progress inventories fully relate to inventories being processed in the Nyrstar smelters.

23. Trade and other receivables

	2020 USD'M	2019 USD'M
Trade debtors	**6,286.7**	7,946.9
Provision for bad and doubtful debts	**(47.8)**	(50.6)
Accrued turnover	**5,539.8**	6,702.2
Broker balances	**1,571.4**	1,147.5
Other debtors	**309.0**	390.3
Loans to third parties	**294.9**	523.6
Loans to related parties	**7.9**	1.1
Other taxes	**438.0**	406.3
Related parties	**845.2**	1,449.2
Total	**15,245.1**	18,516.5

All financial instruments included in trade and other receivables are held to collect the contractual cash flows, except for those subject to certain dedicated financing facilities, which would be held for collection of contractual cash flows and for selling the financial asset. Furthermore, the cash flows that the Group receives on these instruments are solely payments of principal and interest except for trade and other receivables related to contracts including provisional pricing features.

The Group entered into a number of dedicated financing facilities, which finance a portion of its receivables. Part of these facilities meet the criteria of derecognition of the receivables according to IFRS.

As per 30 September 2020 an amount of USD2,513.3 million (30 September 2019: USD2,083.1 million) of trade debtors has been discounted. Of this amount, USD2,318.9 million (30 September 2019: USD1,733.0 million) has been derecognised, as the Group has transferred substantially all the risks and rewards of ownership of the financial asset with non-recourse. The remaining part of discounted receivables which does not meet the criteria for derecognition amounting to USD194.4 million (30 September 2019: USD350.1 million), continues to be recognised as trade debtors. For the received amount of cash of these items the Group has recognised a liability under current loans and borrowings.

Of USD6,286.7 million trade debtors (30 September 2019: USD7,946.9 million), USD1,950.1 million had been sold on a non-recourse basis under the securitisation programme (30 September 2019: USD3,588.3 million). Of the USD845.5 million receivables on related parties (30 September 2019: USD1,449.2 million), USD309.6 million had been sold on a non-recourse basis under the securitisation programme (30 September 2019: USD940.3 million). For more details refer to Note 24.

As at 30 September 2020, 7.3 percent (30 September 2019: 6.4 percent) of receivables were between 1-60 days overdue, and 8.5 percent (30 September 2019: 8.9 percent) were greater than 60 days overdue. Trafigura applied the simplified method in assessing expected credit losses. The accounts receivables have been divided in aging buckets and based on an analysis on historical defaults and recovery rates, and considering forward looking information, a percentage for expected credit losses has been determined. Trafigura manages to limit credit losses by renegotiating contracts in the case of a default. From the above analysis, an expected credit loss as at 30 September 2020 of USD6.0 million (30 September 2019: USD3.9 million) has been taken into account. The loss allowance provision at 30 September 2020 amounts to USD40.7 million (30 September 2019: USD50.6 million). The provision mostly relates to demurrage claims and commercial disputes with our clients. Accrued turnover represents receivable balances for sales which have not yet been invoiced. They have similar risks and characteristics as trade debtors. Trade debtors and accrued turnover have similar cash flow characteristics and are therefore considered to be a homogeneous group of financial assets.

Total trade and other receivables related to contracts including provisional pricing features amount to USD6.5 billion.

24. Securitisation programmes

The Group operates various securitisation programmes. Trafigura Securitisation Finance PLC (TSF) and Argonaut Receivables Company S.A. (Argo) enable the Group to sell eligible receivables. An inventory securitisation programme, through Trafigura Commodities Funding Pte. Ltd. (TCF) and Trafigura Global Commodities Funding Pte. Ltd. (TGCF), enables Trafigura to sell and repurchase eligible inventories. Those securitisation vehicles are consolidated and consequently the securitised receivables and inventories are included within the consolidated trade debtor and inventory balances.

24.1 Receivables securitisations

Over time the external funding of TSF has increased significantly in size, mostly through Variable Funding Notes (VFN) purchased by bank sponsored conduits, while incorporating a longer term committed funding element, in the form of Medium Term Notes (MTN).

Argo was launched in May 2020 and is funded through short-term VFN only.

The available external funding of the receivables securitisation programmes consists of:

	Interest rate	Maturity	2020 USD'M	2019 USD'M
TSF AAA MTN	Libor + 0.85%	2020 – June	–	235.0
TSF AAA MTN	2.47%	2020 – June	–	230.0
TSF BBB MTN	Libor + 1.70%	2020 – June	–	35.0
TSF AAA MTN	Libor + 0.73%	2021 – September	**185.0**	185.0
TSF AAA MTN	3.73%	2021 – September	**280.0**	280.0
TSF BBB MTN	4.33%	2021 – September	**35.0**	35.0
TSF AAA VFN	See Note	Various throughout the year	**2,519.9**	3,097.2
TSF BBB VFN	See Note	Various throughout the year	**189.5**	232.9
Argonaut Receivables Securitisation		2021 – April	**225.0**	–
TSF senior subordinated debt		2023 – March	**91.6**	103.5
Total			**3,526.0**	4,433.6

As at 30 September 2020, the maximum available amount of external funding was USD3,526.0 million (30 September 2019: USD4,433.6 million) for the receivable securitisation programme.

The rate of interest applied to the TSF AAA VFN is principally determined by the demand for commercial paper issued by 10 bank-sponsored conduits. The Group benchmarks the rate provided against 1-week Libor. In the case of the rate of interest applicable to the TSF BBB VFN, the rate of interest is principally determined by the liquidity of the interbank market.

The maturity of the TSF AAA and BBB VFNs have been staggered to diversify the maturity profile of the notes. This aims to mitigate the liquidity wall risk associated with a single maturity date for a significant funding amount.

24.2 Inventory securitisation

	Interest rate	Maturity	2020 USD'M	2019 USD'M
TCF VFN	See Note	2019 – November	–	410.0
TCF MLF	See Note	2019 – November	–	40.0
TCF/ TGCF VFN	See Note	2020 – November	**410.0**	–
TCF/ TGCF MLF	See Note	2020 – November	**40.0**	–
Total			**450.0**	450.0

As at 30 September 2020, the maximum available amount of external funding was USD450.0 million (30 September 2019: USD450.0 million) for the inventory securitisation programme.

The rate of interest applied to the VFN and MLF under the inventories securitisation is defined in the facility documentation.

F. Notes to consolidated financial statements

25. Other current assets

	2020 USD'M	2019 USD'M
Non-financial hedged items	**64.5**	120.1
Prepaid expenses	**278.1**	197.0
Other	**8.6**	1.6
Total	**351.2**	318.7

The non-financial hedged items balance fully relates to the current part of the non-financial hedged items (for more details refer to Note 34.8). Prepaid expenses relate to prepayments other than those made for physical commodities.

26. Cash and cash equivalents and deposits

26.1 Cash and cash equivalents

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for varying periods between one day and three months depending on the immediate cash requirements of the Group and earn interest at the respective short-term deposit rates. The fair value of cash and cash equivalents approximates the carrying value.

An amount of USD43.4 million (30 September 2019: USD40.9 million) of cash at bank is restricted, including restrictions that require the funds to be used for a specified purpose and restrictions that limit the purpose for which the funds can be used, unless fixed asset construction invoices are presented to the banks.

	2020 USD'M	2019 USD'M
Cash at bank and in hand	**5,405.8**	5,476.3
Short-term deposits	**351.2**	790.9
Cash and cash equivalents	**5,757.0**	6,267.2

As at 30 September 2020, the Group had USD9.0 billion (30 September 2019: USD9.2 billion) of committed unsecured syndicated loans, of which USD3.8 billion (30 September 2019: USD2.3 billion) remained unutilised. The Group had USD3.3 billion (30 September 2019: USD3.2 billion) of immediately (same day) available cash in liquidity funds. Therefore, the Group had immediate access to available liquidity balances from liquidity funds and corporate facilities in excess of USD7.1 billion (30 September 2019: USD5.5 billion).

26.2 Deposits

Short-term deposits made for periods longer than three months are separately shown in the statement of financial position and earn interest at the respective short-term deposit rates.

27. Capital and reserves

27.1 Share capital

As at 30 September 2020, the Company has 25,000,000 ordinary shares outstanding and a capital of USD1,504 million. During the financial year ended 30 September 2020 no changes took place in the outstanding share capital.

The holders of ordinary shares are entitled to receive dividends as and when declared by the Company. All ordinary shares carry one vote per share without restriction. The ordinary shares have no par value.

27.2 Capital securities

As part of the financing of the Company and its subsidiaries, the Company has two capital securities instruments with a total carrying value of USD1,097.7 million as at 30 September 2020 (2019: USD1,073.8 million). These two capital securities have a par value of USD800 million and EUR262.5 million respectively (2019: USD800 and EUR262.5 million respectively).

These two capital securities are perpetual in respect of which there is no fixed redemption date. The distribution on the capital securities is payable semi-annually in arrears every six months from the date of issue. The Company may elect to defer (in whole but not in part) any distribution in respect of these capital securities by providing no more than 30 or less than 5 business days' notice, unless a compulsory interest payment event has occurred, including amongst others the occurrence of a dividend payment in respect of subordinated obligations of the Company. Any interest deferred shall constitute arrears of interest and shall bear interest.

In the event of a winding-up, the rights and claims of the holders in respect of the capital securities shall rank ahead of claims in respect of the Company's shareholders, but shall be subordinated in right of payment to the claims of all present and future senior obligations, except for obligations of the Company that are expressed to rank pari passu with, or junior to, its obligations under the capital securities.

The USD800 million capital security was originally issued on 21 March 2017 for USD600 million, and the issuance was re-opened for an additional amount of USD200 million on 21 November 2017. The USD800 million capital security is listed on the Singapore Stock Exchange. The distribution on the capital security is 6.875 percent per annum until the distribution payment date in March 2022. The capital security may be redeemed at the Company's option in whole, but not in part, in the period starting 90 calendar days before, and ending of, the distribution payment date in March 2022 or any distribution date thereafter upon giving not less than 30 nor more than 60 days' notice to the holders. The early redemption amount payable by the Company shall be the principal amount of the capital security, together with any interest accrued to the date fixed for redemption, all arrears of interest and all additional interest amounts.

The EUR262.5 million capital security was issued on 31 July 2019 and is listed on the Singapore Stock Exchange. The distribution on the capital security is 7.5 percent per annum until the distribution payment date in July 2024. The capital security may be redeemed at the Company's option in whole, but not in part, in the period starting 90 calendar days before, and ending of, the distribution payment date in July 2024 or any distribution date thereafter upon giving not less than 30 nor more than 60 days' notice to the holders. The early redemption amount payable by the Company shall be the principal amount of the capital security, together with any interest accrued to the date fixed for redemption, all arrears of interest and all additional interest amounts.

27.3 Currency translation reserve

The currency translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as from the translation of liabilities that hedge the Company's net investment in a foreign operation. The currency translation reserve as per 30 September 2020 includes a negative reserve of USD725.8 million related to the equity investment in Puma Energy Holdings Pte. Ltd.

For the impact of hyperinflation accounting, refer to Note 37.

27.4 Revaluation reserve

The revaluation reserve comprises the fair value measurements movements of the equity investments which are accounted for at fair value through other comprehensive income. On realisation of these gains or losses (for example, the sale of an equity instrument), the cumulative amounts of this reserve are transferred to retained earnings. Included in the revaluation reserve is a loss of USD63.3 million (30 September 2019: USD29.0 million loss) related to the mark-to-market valuation of equity investments.

27.5 Cash flow hedge reserve

The Group has elected not to apply the cost of hedging option. A change in the fair value of derivatives designated as a cash flow hedge is initially recognised as a cash flow hedge reserve in OCI. The deferred amount is then released to the statement of income in the same period during which the hedged transaction affects the statement of income.

Included in the cash flow hedge reserve is a loss of USD79.4 million (30 September 2019: USD100.6 million loss) related to the effective portion of the changes in fair value of cash flow hedges, net of tax. These cash flow hedges relate to hedging of interest and currency exposure on corporate loans and hedging of price exposure on future purchases and sales of commodities. The losses on hedging derivatives currently shown in the cash flow hedge reserve will be offset by decreased purchase/ finance costs and increased sales values in the period the hedged transactions are recognised. Over time, the overall net impact of the hedged items and hedging instruments together on the statement of income and OCI will be minimal.

The cash flow hedge reserves as at 30 September 2020 includes a negative reserve of USD57.6 million relating to the Group's share in the cash flow hedge reserves of equity-accounted investees (30 September 2019: USD13.4 million negative).

27.6 Dividends

The value of the dividends declared on the ordinary shares amount to USD585.9 million (2019: USD336.7 million), representing USD23.4 per share (2019: USD13.5 per share). Dividend payments are mostly made in relation to the share redemption by the direct parent company.

28. Material partly owned subsidiaries

Financial information of subsidiaries that have material non-controlling interest is provided below. The information is based on amounts before intercompany eliminations.

The Company has control over DTS Holdings Pte. Ltd. with a 50 percent equity interest (2019: 50 percent). DTS Holdings Pte. Ltd. is a business venture between the Group and Cochan Singapore Pte. Ltd. and is the main holding company of the DT Group. The DT Group's activities span trading, shipping, infrastructure, asset management and logistics.

The summarised statement of income is as follows:

	2020 USD'M	2019 USD'M
Revenue	**16.7**	103.2
Cost of sales	**(4.3)**	(80.9)
General and administrative expenses	**(8.0)**	(10.6)
Other income/(expense)	**(220.9)**	(2.5)
Net financing income	**9.1**	(12.9)
Profit before tax	**(207.4)**	(3.7)
Tax (expense)/ income	**–**	0.2
Profit for the period	**(207.4)**	(3.5)
Attributable to non-controlling interest	**(103.7)**	(1.8)

During 2020, DTS Holdings Pte. Ltd. paid a dividend of USD nil (2019: USD6.8 million).

The summarised statement of financial position as at 30 September is as follows:

	2020 USD'M	2019 USD'M
Total non-current assets	**156.8**	294.0
Total current assets	**355.2**	458.9
Total current liabilities	**(83.2)**	(116.7)
Total equity	**428.8**	636.2
Attributable to		
Non-controlling interests	**214.3**	318.0
Owners of the Company	**214.5**	318.2

F. Notes to consolidated financial statements

29. Loans and borrowings

This note provides information about the contractual terms of the Group's interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group's exposure to interest rate, foreign currency and liquidity risk, refer to Note 35.

Carrying value of loans and borrowings	2020 USD'M	2019 USD'M
Non-current		
Committed unsecured syndicated loans	**3,962.8**	5,167.1
Private placements	**650.3**	785.7
Listed bonds	**1,203.0**	835.4
Securitisation programmes	**91.6**	500.0
Other loans	**391.6**	467.6
Finance leases	**–**	5.3
Non-current bank borrowings	**770.8**	731.0
Total non-current	**7,070.1**	8,492.1
Current		
Committed unsecured syndicated loans	**1,029.6**	1,496.1
Private placements	**355.3**	275.8
Listed bonds	**–**	599.8
Securitisation programmes	**3,040.0**	4,206.3
Other loans	**201.1**	293.1
Finance leases	**–**	14.5
Current bank borrowings	**21,157.6**	15,569.9
Total current	**25,783.5**	22,455.5
Total	**32,853.6**	30,947.6

Net lease liabilities and debt reconciliation	Non-current debt USD'M	Current debt USD'M	Lease Liabilities USD'M	Cash and cash equivalents USD'M	Net lease liabilities and debt USD'M
At 1 October 2019	**(8,492.1)**	**(22,455.5)**	**–**	**6,267.2**	**(24,680.4)**
Adoption of IFRS 16	5.3	14.5	(2,764.9)		(2,745.1)
Cashflow movements	206.7	(2,281.7)	999.0	(510.2)	(1,586.1)
Additions	–	–	(623.1)	–	(623.1)
Currency translation gains/(losses)	(37.4)	(70.7)	–	–	(108.1)
Reclassifications from long term to short term	1,257.2	(1,257.2)	–	–	–
Other movements	(9.7)	267.1	–	–	257.4
At 30 September 2020	**(7,070.0)**	**(25,783.5)**	**(2,389.1)**	**5,757.0**	**(29,485.5)**
At 1 October 2018	**(8,462.1)**	**(23,741.6)**	**–**	**5,355.8**	**(26,847.9)**
Acquired through business combinations	(830.0)	(89.8)	–	180.2	(739.6)
Issuance of debt as consideration for acquisition of Nyrstar	(238.6)	–	–	–	(238.6)
Cashflow movements	(886.5)	3,420.0	–	731.2	3,264.7
Finance lease additions	(4.2)	–	–	–	(4.2)
Currency translation gains/(losses)	(18.1)	66.1	–	–	48.0
Reclassifications from long term to short term	1,948.3	(1,948.3)	–	–	–
Other movements	(0.9)	(161.9)	–	–	(162.8)
At 30 September 2019	**(8,492.1)**	**(22,455.5)**	**–**	**6,267.2**	**(24,680.4)**

During the financial year ended 30 September 2020, a number of important transactions for the Group were completed:

- In October 2019, the Group closed a new syndicated revolving credit facility and term loan facilities at USD1.5 billion-equivalent composed of a 365-day US dollar revolving credit facility (USD760 million), a one-year Chinese yuan renminbi term loan facility (USD445 million) and a three-year US dollar term loan facility (USD300 million). Funding will be used to refinance previous loan tranches and support general corporate needs.
- In March 2020, the Group refinanced its 365-day European multi-currency revolving credit facility totalling USD1.9 billion. The 365-day ERCF will be used to refinance the maturing USD2.05 billion 365-day facility dated 14 March 2019, as well as for general corporate purposes.
- Also in March 2020, the Group raised JPY76.8 billion (circa USD720 million equivalent at spot rate) via a Japanese yen denominated term loan (the Samurai loan) in the Japanese domestic syndicated bank loan market. In addition to the three-year tranche, which Trafigura has refinanced every two years since 2012, Trafigura introduced an inaugural five-year tranche. This transaction refinances the 2018 Samurai loan and will be used for general corporate purposes.
- Finally, Trafigura Funding S.A., a dedicated funding vehicle of the Group, issued USD203 million of notes in March 2020 in the US Private Placement market, with tenors of 5, 7 and 10 years. Proceeds were used to refinance USD51.5m of maturing USPP notes and to support the refinancing of Trafigura's EUR 550 million bond coming due in April 2020.

The Group was in compliance with all its corporate and financial covenants as at 30 September 2020.

29.1 Terms and debt repayment schedule

The terms and conditions of the outstanding debt (excluding short-term bank borrowings) per 30 September 2020 are as follows:

Principal		Interest rate	Maturity	Floating/fixed rate debt	< 1 year USD'M	1–5 years USD'M	> 5 years USD'M	Total USD'M
Committed unsecured syndicated loans								
CNH	4,052.8	Libor + 1.00%	2020 – October	Floating	594.6	–	–	**594.6**
USD	760.0	Libor + 0.65%	2020 – October	Floating	–	–	–	**–**
USD	435.0	Libor + 1.10%	2020 – October	Floating	435.0	–	–	**435.0**
USD	1,965.0	Libor + 0.55%	2021 – March	Floating	–	–	–	**–**
USD	875.0	Libor + 0.80%	2022 – March	Floating	–	700.0	–	**700.0**
USD	520.0	Libor + 1.10%	2021 – October	Floating	–	520.0	–	**520.0**
USD	300.0	Libor + 1.10%	2022 – October	Floating	–	300.0	–	**300.0**
JPY	67,800.0	Libor + 0.90%	2023 – March	Floating	–	642.5	–	**642.5**
USD	2,740.0	Libor + 0.80%	2023 – March	Floating	–	1,715.0	–	**1,715.0**
JPY	9,000.0	Libor + 1%	2025 – March	Floating	–	85.3	–	**85.3**
					1,029.6	3,962.8	–	**4,992.3**
Private placement								
USD	98.0	7.11%	2021 – April	Fixed	98.0	–	–	**98.0**
CNY	500.0	6.50%	2021 – April	Fixed	73.7	–	–	**73.7**
CNY	500.0	6.50%	2021 – May	Fixed	73.6	–	–	**73.6**
CNY	700.0	6.20%	2021 – September	Fixed	103.2	–	–	**103.2**
CNY	540.0	5.49%	2022 – May	Fixed	–	79.6	–	**79.6**
USD	57.5	5.53%	2023 – March	Fixed	–	57.5	–	**57.5**
USD	53.0	5.55%	2023 – May	Fixed	–	53.0	–	**53.0**
USD	35.0	4.01%	2025 – March	Fixed	–	35.0	–	**35.0**
USD	67.0	5.72%	2025 – May	Fixed	–	67.0	–	**67.0**
USD	83.0	4.17%	2027 – March	Fixed	–	–	83.0	**83.0**
USD	20.0	5.86%	2028 – May	Fixed	–	–	20.0	**20.0**
USD	85.0	4.60%	2030 – March	Fixed	–	–	85.0	**85.0**
USD	200.0	6.33%	2036 – July	Fixed	6.7	31.4	138.8	**176.9**
					355.3	323.5	326.8	**1,005.6**
Listed bonds								
USD	444.4	5.25%	2023 – March	Fixed	–	441.7	–	**441.7**
CHF	165.0	2.25%	2023 – May	Fixed	–	179.0	–	**179.0**
CHF	55.0	3.25%	2024 – September	Fixed	–	59.7	–	**59.7**
USD	186.4	0.00%	2026 – July	Fixed	–	–	122.5	**122.5**
USD	400.0	5.875%	2025 – September	Fixed	–	400.0	–	**400.0**
					–	1,080.4	122.5	**1,203.0**
Securitisation programmes								
USD	410.0	Libor + 1.0%	2020 – November	Floating	372.5	–	–	**372.5**
USD	40.0	Libor + 0.5%	2020 – November	Floating	8.4	–	–	**8.4**
USD	225.0	Libor + 1.0%	2021 – April	Floating	225.0	–	–	**225.0**
USD	280.0	3.73%	2021 – September	Fixed	280.0	–	–	**280.0**
USD	185.0	Libor + 0.73%	2021 – September	Floating	185.0	–	–	**185.0**
USD	35.0	4.33%	2021 – September	Fixed	35.0	–	–	**35.0**
USD	91.6	Libor + 4.25%	2023 – March	Floating	–	91.6	–	**91.6**
USD	2,709.4	Various	Various	Floating	1,934.1	–	–	**1,934.1**
					3,040.0	91.6	–	**3,131.6**
Other Loans					201.1	327.4	64.2	**592.7**
Total					**4,625.8**	**5,785.7**	**513.6**	**10,925.2**

For non-current assets pledged under loans and borrowings agreements, refer to Note 14.

F. Notes to consolidated financial statements

30. Provisions

The movement in the provisions balance during the year was as follows:

	Decommissioning, rehabilitation and restoration USD'M	Employee benefits provision USD'M	Other provisions USD'M	**Total USD'M**
Opening balance 1 October	216.9	91.0	36.0	**343.9**
Additions	18.4	–	63.4	**81.8**
Reversals	(10.9)	0.0	(7.9)	**(18.8)**
Additions through business combinations	–	–	–	**–**
Amounts charged against provisions	(8.9)	–	(17.7)	**(26.6)**
Unwind of discount	11.8	–	0.2	**12.0**
Remeasurements and other movements	(8.8)	(15.3)	3.3	**(20.8)**
Closing balance 30 September	218.5	75.7	77.3	**371.5**
Non-current portion	210.4	75.7	30.3	**316.4**
Current portion	8.1	–	47.0	**55.1**
Closing balance 30 September	218.5	75.7	77.3	**371.5**

Provisions consist of decommissioning, rehabilitation and restoration provisions amounting to USD218.4 million (2019: USD216.9 million), employee benefits provisions of USD75.8 million (2019: USD91.0 million) and other provisions amounting to USD77.2 million (2019: USD36.0 million).

Provisions for decommissioning, rehabilitation and restoration costs are recognised due to the environmental commitment the Group has made with local authorities and for its obligations to undertake site reclamation and remediation in connection with its mining and downstream activities.

Included in Other are provisions for litigation and disputes, and onerous contracts.

31. Other non-current liabilities

	2020 USD'M	2019 USD'M
Non-financial hedged items	**325.8**	171.6
Other	**396.2**	200.8
Total	**722.0**	372.4

For further information on the non-financial hedged items, refer to Note 35.8.

32. Trade and other payables

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in Note 35.

	2020 USD'M	2019 USD'M
Trade creditors	**2,618.9**	3,114.2
Accrued costs of sales and expenses	**8,341.5**	10,775.8
Related parties	**120.6**	45.2
Total	**11,081.0**	13,935.2

Total trade and other payables related to contracts including provisional pricing features amount to USD6.2 billion.

33. Other current liabilities

	2020 USD'M	2019 USD'M
Non-financial hedged items	**459.5**	64.1
Other	**29.4**	21.9
Total	**488.9**	86.0

The non-financial hedged items balance fully relates to the current part of the non-financial hedged items, refer to Note 35.8 for further information.

34. Contingencies and commitments

The Company and its subsidiaries are party to a number of legal claims and proceedings arising out of their business operations. The Company believes that the ultimate resolution of these claims and proceedings will not, in the aggregate, have a material adverse effect on the Group's financial position, income or cash flows. Such legal claims and proceedings, however, are subject to inherent uncertainties and the outcome of individual matters is unpredictable. It is possible that the Group could be required to make expenditures, in excess of established provisions, in amounts that cannot be reasonably estimated.

The total contingent liabilities related to trade finance instruments, such as letters of credit and guarantees, as at 30 September 2020 amount to USD4,535.3 million (30 September 2019: USD8,632.9 million).

The Group had outstanding commitments at the end of 30 September 2020 and 2019 as follows:

	2020 USD'M	2019 USD'M
Assets under construction	**82.2**	79.1
Total commitments	**82.2**	79.1

The Group has a potential financial exposure resulting from certain oil trading and risk management activities of its counterparty's representative. These activities are the subject of on-going actions, claims and disputes against the Group. The underlying circumstances regarding these actions, claims and disputes are complex and opaque, and consequently, how these disputes and actions will be resolved is uncertain. The provisions taken for them are reviewed annually (and adjusted appropriately) based on the most current information and advice.

Guarantees include guarantees to trading partners in the normal course of business.

35. Financial instruments

35.1 Financial risk management

The Group is exposed to a number of different financial risks arising from normal business exposures and its use of financial instruments, including market risks relating to commodity prices, foreign currency exchange rates, interest rates and equity prices, credit risk and liquidity risk.

Prudently managing these risks is an integral element of the Group's business and has been institutionalised since the Group's foundation. Risk management guidelines are established at senior management level. The various risks the Group is exposed to are managed through a combination of internal procedures, such as strict control mechanisms and policies, and external third parties, such as the derivative, insurance and bank markets. As a rule, the Group actively manages and lays off where possible a large majority of the risks inherent to its activity. The Group's conservative risk management process is designed to:

- Provide full and accurate awareness of risks throughout the Group;
- Professionally evaluate and monitor these risks through a range of risk metrics;
- Limit risks via a dynamic limit setting framework;
- Manage risks using a wide range of hedging instruments and strategies; and
- Ensure a constant dialogue between trading desks, risk managers and senior management.

The three main components of the Group's risk management process are the Chief Risk Officer (CRO), the Market Risk Management Committee and the trading teams.

The CRO is independent of the revenue-producing units and reports to the Chief Operating Officer and the Management Committee. The CRO has primary responsibility for assessing and monitoring the Group's market risks. The CRO's team liaises directly with the trading teams to analyse new opportunities and ensure that risk assessments adapt to changing market conditions. The CRO's team also ensures that the Group's risk management capabilities incorporate ongoing advances in technology and risk management modelling capabilities.

The Market Risk Management Committee, which is comprised of members of the Management Committee and the CRO, is responsible for applying the Group's risk management capabilities towards improving the overall performance of the Group. In 2020, the Market Risk Management Committee met at least weekly to discuss and set risk and concentration limits, review changing market conditions and analyse new market risks and opportunities.

The Group's trading teams provide deep expertise in hedging and risk management in the specific markets that each team operates in. While the trading teams have front line responsibility for managing the risks arising from their activities, the Group's process ensures a strong culture of escalation and accountability, with well-defined limits, automatic notifications of limit overages and regular dialogue with the CRO and Market Risk Management Committee.

35.2 Market risk

Market risk is the risk of loss in the value of the Group's positions due to changes in market prices. The Group holds positions primarily to ensure the Group's ability to meet physical supply commitments to the Group's customers, to hedge exposures arising from these commitments, and to support the Group's investment activities. The Group's positions change due to changing customer requirements and investment opportunities. The value of the Group's positions is accounted for at fair value and therefore fluctuates on a daily basis due to changes in market prices. Categories of market risk the Group is exposed to include:

- Commodity price risk results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, base metals, coal and iron ore.
- Currency rate risk results from exposures to changes in spot prices, forward prices and volatilities of currency rates.
- Interest rate risk results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates and credit spreads.
- Equity price risk results from exposures to changes in prices and volatilities of individual equities and equity indices.

The Group hedges a large majority of price risks arising from its activities. When there is a difference in the characteristics of available hedging instruments and the corresponding commodity price exposures, the Group remains exposed to a residual price risk referred to as basis risk. Dynamically managing the basis risk that arises from the Group's activities requires specialist skills and is a core focus of the Group's trading and risk management teams.

Value at Risk

Value at Risk (VaR) is a statistical estimate of the potential loss in value of the Group's positions and unsold in-transit material due to adverse market movements. The Group calculates VaR over a one-day time horizon with a 95 percent confidence level. The Group uses an integrated VaR model which captures risks including commodity prices, interest rates, equity prices and currency rates. The Group's integrated VaR model facilitates comparison of VaR across portfolios comprised of a range of different risk exposures.

As of 30 September 2020, the Group's one-day market risk VaR was USD10.3 million (30 September 2019: USD24.1 million). Average market risk VaR (1 day 95 percent) during the period was USD26.4 million, compared to USD11.6 million in the previous full financial year. The Group's Management Committee has set a target of maintaining VaR (one-day 95 percent) below 1 percent of Group equity.

The Group is aware of the inherent limitations to VaR and therefore uses a variety of risk measures and risk management techniques to create a robust risk management process. Limitations of VaR include:

- VaR does not estimate potential losses over longer-time horizons where the aggregate moves may be extreme.
- VaR does not take account of the liquidity of different risk positions and therefore does not estimate the losses that might arise if the Group liquidated large positions over a short period of time.
- VaR is based on statistical analysis of historical market data. If this historical data is not reflective of futures market prices movements, VaR may not provide accurate predictions of future possible losses.

F. Notes to consolidated financial statements

The Group's VaR calculation covers its trading businesses in the crude oil, refined oil products, petrochemical, natural gas, metals, concentrates, coal, iron ore and freight markets, and assesses the open-priced positions which are those subject to price risk, including inventories of these commodities. The Group's VaR model is based on historical simulations, with full valuation of more than 5,000 market risk factors.

VaR is calculated based on simultaneously shocking these risk factors. More recent historical price data is more heavily weighted in these simulations, which enables the VaR model to adapt to more recent market conditions and improves the accuracy of the Group's estimates of potential losses.

The Group's VaR model utilises advanced statistical techniques that incorporate the non-normal price dynamics that are an important feature of commodity markets. The Group's VaR model is continuously and automatically calibrated and back-tested to ensure that its out-of-sample performance adheres to well-defined targets. In addition, the Group's VaR model is regularly updated to ensure it reflects the current observed dynamics of the markets the Group is active in.

The Group has made a significant, ongoing investment in risk management systems, including a reporting system which automatically distributes customised risk reports throughout the Group on a daily basis. These reports provide up-to-date information on each team's risk using industry standard measures such as 95 percent and 99 percent VaR and performance indicators such as Sharpe ratios.

All trading books have well-defined VaR risk limits. Management and the trading teams are automatically notified whenever a book nears its risk limit, as well as whenever a VaR limit breach occurs. In addition, the Group's Deals Desk management team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

For senior management, the daily reports provide a comprehensive view of the Group's risk, classified according to various risk factors. These reports emphasise the risk diversification created by the Group's varied activities and highlight any excessive risk concentrations.

35.3 Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument or physical contract fails to meet its contractual obligations, and arises principally from the Group's receivables from customers, and investment in debt and equity securities.

The Group has a formalised credit process with credit officers in the key locations around the world. Strict credit limits are set up for each counterparty on the basis of detailed financial and business analysis. These limits are constantly monitored and revised in light of counterparty or market developments and the amount of exposure relative to the size of the Group's statement of financial position. The Group makes extensive use of the banking and insurance markets to cover any counterparty or country risks that are in excess of its credit limits.

The risk-management-monitoring and decision-making functions are centralised and make extensive use of the Group's integrated bespoke IT system. The Group conducts transactions with the following major types of counterparties:

- Physical commodity counterparties spread across the vertical chains for both oil and bulk, e.g. producers, refiners/smelters and end-users. Sales to investment grade and non-investment grade counterparties are made on open terms up to internally approved credit limits. Exposures above such limits are subject to payment guarantees.
- Payment guarantee counterparties, i.e., prime financial institutions from which the Group obtains payment guarantees.
- Hedge counterparties, which comprise a number of prime financial institutions and physical participants in the relevant markets. There is no significant concentration of risk with any single counterparty or group of counterparties. Collateral is obtained from counterparties when the Group's exposure to them exceeds approved credit limits. It is the Group's policy to have ISDA Master Agreements or ISDA-based Long-Form Confirmation Agreements in place with all hedging counterparties.

The Group trades in all major geographic regions. Where appropriate, guarantees, insurance and letters of credit are used to reduce payment or performance risk. The Group has gross credit exposure in locations across the world with a concentration in emerging markets. Most of this exposure is transferred to third parties, while the Group retains between 10 percent to 20 percent on average of the individual exposures.

The Group's maximum exposure to credit risk, without considering netting agreements or without taking into account of any collateral held or other credit enhancements, is equal to the carrying value of its financial assets as indicated in the statement of financial position plus the guarantees to third parties and associates.

The Group has amounts and guarantees outstanding related to countries that are impacted by sanctions currently imposed by the United States and European Union. The Group analysed the sanctions and exposures and concluded that these do not materially impact the Group's positions.

35.3.1 Concentration of credit risk

Concentrations of credit risk exist when changes in economic, industry or geographical factors similarly affect the Group's counterparties, whose aggregate credit exposure is significant in relation to the Group's total credit exposure. The carrying amount of financial assets represents the maximum credit exposure. The Group determines concentrations of credit risk by monitoring the country profile of its third-party trade receivables on an on-going basis.

The Group has a diverse customer base, with no customer representing more than 3.5 percent of its revenues over the 12-month period ended 30 September 2020 (2019: 4.5 percent).

For details on the aging of trade and other receivables at the reporting date that were not impaired, refer to Note 23.

35.3.2 Financial assets that are not past due

Trade and other receivables that are not past due are creditworthy debtors with good payment records with the Group. Cash and cash equivalents and derivatives that are not past due are placed with or entered into with reputable financial institutions or companies with high credit ratings and no history of default. The credit quality of trade and other receivables is assessed based on a strict credit policy. The Group has monitored customer credit risk, by grouping trade and other receivables based on their characteristics.

Based on the Group's monitoring of customer credit risk, the Group believes that, except as indicated above, no material expected credit loss allowance is necessary in respect of trade receivables not past due.

35.3.3 Impairments of financial assets

Information regarding impairment of financial assets is disclosed in Note 11 (Impairment) and Note 23 (Trade and other receivables).

35.3.4 Guarantees

The Group's policy is to provide financial guarantees only to wholly owned subsidiaries and trading partners in the normal course of business. As part of the Group's ordinary physical commodity trading activities, Trafigura Group Pte. Ltd. may act as guarantor by way of issuing guarantees accepting responsibility for subsidiaries' contractual obligations.

35.4 Liquidity risk

Liquidity risk is the risk that the Group is unable to meet its payment obligations when due, or that it is unable, on an on-going basis, to borrow funds in the market on an unsecured or secured basis at an acceptable price to fund actual or proposed commitments.

The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient cash and cash equivalents and ready sources of committed funding available to meet anticipated and unanticipated funding needs. Sound financial management with a focus on liquidity has been instrumental to the Group's success. The Group has demonstrated the ability to raise the appropriate types of financing to match the needs of the business and to tap various investor bases (e.g., syndicated loan markets, trade finance markets, bond markets, private placement markets and securisation), maturities and geographies.

The Group manages its treasury and liquidity risks, maintaining a strong liquidity position, through the following:

- Targeting immediately available cash on hand of a minimum amount of USD500 million under normal conditions (higher in the case of extreme volatility);
- Maintaining transactional lines which allow the Group to mark-to-market financings to the value of the underlying physical assets. Mark-to-market financing is performed weekly (or intra-weekly in the case of extreme volatility) and provides an additional source of liquidity that is not available to competitors, which are financed purely from revolving credit facilities and/or capital markets securities;
- Committed unsecured credit facilities;
- Maintaining headroom under transactional trade finance lines and committed revolving credit facilities; and
- Reasonable distribution of profit (in order to generate retained earnings) and subordination of repurchased equity.

The maturity analysis of the Group's financial liabilities based on the contractual terms is as follows:

	0-1 years USD'M	1-5 years USD'M	> 5 years USD'M	**Total USD'M**
30 September 2020				
Financial liabilities				
Current and non-current loans and borrowings	25,783.5	6,556.5	513.6	**32,853.6**
Trade and other payables	11,081.0	–	–	**11,081.0**
Expected interest payments on committed lines until maturity	366.1	538.4	152.0	**1,056.5**
Derivative financial liabilities	640.1	162.6	28.2	**830.9**
Total financial liabilities	**37,870.7**	**7,257.5**	**693.8**	**45,822.0**

	0-1 years USD'M	1-5 years USD'M	> 5 years USD'M	**Total USD'M**
30 September 2019				
Financial liabilities				
Current and non-current loans and borrowings	22,455.5	8,094.5	397.6	**30,947.6**
Trade and other payables	13,935.2	–	–	**13,935.2**
Expected interest payments on committed lines until maturity	367.0	441.9	144.5	**953.4**
Derivative financial liabilities	746.0	346.6	27.0	**1,119.6**
Total financial liabilities	**37,503.7**	**8,883.0**	**569.1**	**46,955.8**

35.5 Interest rate risk

The Group is not exposed to significant interest rate risk since the maturity of its short-term funding ranges from a few weeks to a few months and each commercial transaction considers current interest rate levels. Interest rate risk of the Group is mainly applicable on the long-term funding of the Group, although a majority of debt, whether long-term or short-term, is at floating rate.

From time to time, the Group enters into interest rate derivative transactions to lock-in current interest rate levels: for instance, interest rate swaps that provide a method of reducing the Group's exposure to floating interest rates arising from its corporate funding programmes. To realise the desired matching of derivative results with the hedged interest rate payments, cash flow hedge accounting is applied and the derivatives are designated as hedging instruments. The derivatives are carried on balance and their effectiveness is tested on a quarterly basis.

F. Notes to consolidated financial statements

35.6 Currency risk

The Group has few exposures to foreign currency risk on its trading activities and those that do exist are hedged out. The Group does not use financial instruments to hedge the translation risk related to equity and earnings of foreign subsidiaries and non-consolidated companies.

The Group uses cross-currency swaps to hedge currency risk on the principal and related payments of foreign currency denominated loans and bonds for which cash flow hedge accounting is applied. The hedge relationship is expected to be highly effective due to the matching of critical terms between the underlying hedged item and the associated hedge instrument.

The periods when the cash flows are expected to occur are similar to the periods when the cash flows on the foreign currency denominated loans and bonds occur as indicated in Notes 27 and 35.4. Ineffectiveness may arise (i) if the underlying interest reference rate is divergent to the underlying reference rate in the Group's debt agreements; (ii) to the extent that the hedging instrument is already in the money or out of the money at the point of designation (compared to the hypothetical derivative that must be created on market); (iii) when the timing of the hedging instrument goes beyond the hedged item and it is not considered highly probable that the hedged item will be refinanced beyond its current maturity date; or (iv) if the hedging instrument is for an amount greater than the hedged item.

35.7 Cash flow hedge accounting

In some instances the Group has elected to apply cash flow hedge accounting to certain highly probable cash flows. These cash flows relate to the following hedged items:

- Forecasted purchases and sales of LNG;
- Sales of mining production;
- Purchases of electricity that is needed for the refinery process;
- Operating expenditure, interest payments and other forecasted purchases and sales.

The designated hedge derivatives are accounted for at fair value, with the fair value movements being deferred through other comprehensive income where they are deemed to be entered in an effective hedge relationship with cash flows that are yet to be reflected in the statement of income. Any fair value movements that are not considered to be an effective hedge are recognised directly through the statement of income.

Ineffectiveness will occur due to time spread between the hedged item and the hedging instrument as well as due to the basis risk. The effectiveness of the economic relationship between the hedging instruments and the hedged item has been assessed at the inception of the hedge accounting designation and is reassessed at least on an annual basis. The hedge ratio is determined by the ratio which provides a strong relationship between movements in the fair value of the hedged item and hedging instruments at the inception of the hedge accounting relationship.

The overview of the cash flow hedges is as follows:

	Maturity	Equivalent	Notionals 2020 USD'M	Notionals 2019 USD'M	Fair values 2020 USD'M	Fair values 2019 USD'M
Cross-currency/ interest swaps hedging interest payments	0-4 years	USD'M	**2,094.7**	2,453.8	**(20.9)**	(80.4)
Gas and fx futures/ swaps hedging future purchases and sales of LNG	0-4 years	various	**604.3**	937.9	**(51.5)**	(94.6)
Fx swaps hedging future non-USD loan transaction and opex payments	0-4 years	USD'M	**2,089.1**	1,245.7	**77.2**	(31.2)
LME futures hedging future sales and mining production	0-2 years	DMT	**261,661.4**	15,225.0	**(8.0)**	(1.2)
Electricity swaps hedging future purchase of electricity	0-10 years	AUD'M	**592.1**	594.0	**(70.6)**	(11.4)
Oil related instruments hedging future purchases, sales and cost	< 1 year	USD'M	**25.5**	–	**1.0**	–
Total					**(72.8)**	**(218.9)**

2020	Ineffectiveness recognised through statement of income	Gain/(loss) on cash flow hedges through other comprehensive income
Cross-currency/interest swaps hedging interest payments	3.5	(33.3)
Gas and fx futures/swaps hedging future purchases and sales of LNG	0.3	35.1
Fx swaps hedging future non-USD loan transaction and opex payments	14.2	78.0
LME futures hedging future sales and mining production	1.7	18.8
Electricity swaps hedging future purchase of electricity	(0.1)	(52.7)
Oil related instruments hedging future purchases, sales and cost	0.1	1.0
Total	**19.6**	**46.7**
Cash flow on hedge reserve on equity-accounted investees		(43.7)
Tax on cash flow hedge reserve		18.1
Cash flow hedge reserve movement in statement of changes in equity		**21.1**

35.8 Fair value hedge accounting

In some instances, the Group elects to apply fair value hedge accounting to certain physical forward contracts described in the table below (the hedged items) and the corresponding paper hedge positions (the hedging instruments). Under the strict rules of hedge accounting, the Group is required to match each paper hedge position with the corresponding physical contract position. The intention is that a movement in fair value of a physical contract is accounted against the corresponding (and opposite) movement in fair value of the related paper hedges: both movements (increase and decrease) are recorded in the statement of income (specifically to the line cost of sales), leading to a neutral result. It is important to note that the fair value of the physical contracts does not include any trading margin, premium or any form of potential profit of the physical contracts.

The Group has elected to apply fair value hedge accounting to non-financial hedged items or certain risk components of non-financial hedged items. These non-financial hedged items relate to firm commitments with respect to tolling agreements, a transportation agreement, and offtake agreements amongst others described below.

	Tolling agreements	Transportation agreements	Offtake agreements
Nature of forward contract (=hedged item)	Convert crude to refined products	Transport crude from Permian Basin to Gulf Coast	Offtake LNG in the US
Main counterparty of forward contract	Buckeye Texas Processing LLC and Magellan Processing LP	Cactus II Pipeline LLC	Cheniere Marketing LLC and Freeport LNG Marketing LLC
Maturity of forward contract	Ranging from 2020 to 2023	Ranging from 2020 to 2024	Ranging from 2020 to 2033
Trading strategy	Process crude into refined products	Transport crude from Permian Basin to Gulf Coast	Purchase LNG in the US, transport, transform back into natural gas, and sell natural gas in Europe
Nature of paper hedge (=hedging instrument)	Hedging spread exposure (crude vs refined products) with futures and swaps	Hedging spread exposure (Permian Basin crude vs Gulf Coast crude) with futures and swaps	Hedging spread exposure (LNG in the US vs natural gas in Europe) with futures and swaps

35.8.1 Hedged items

The Group's tolling agreements represent non-financial hedged items, which the Group has entered into for fractionation services to convert crude feedstock into various crude refined products. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into to hedge the spread exposures, referred to as the hedged risk, between the purchase of crude feedstock and the sale of crude refined products.

The Group's transportation agreement represents a non-financial hedged item, which the Group has entered into for the transportation of crude oil from the Permian Basin of Texas to the Gulf Coast. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into to hedge the spread exposures, referred to as the hedged risk, between the purchase of inland crude oil barrels and the sale of those barrels on the Gulf coast.

The Group's offtake agreements represent a non-financial hedged item, which the Group has entered into for the purchase of liquefied natural gas (LNG) from the United States with a number of counterparties. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into to hedge the spread exposures, referred to as the hedged risk, between purchasing LNG from the US and selling LNG to its expected destination markets.

The Group's storage and bareboat charter agreements represent non-financial hedged items, which the Group has entered into for the purpose of storing and transporting oil. The derivative hedging instruments are entered to hedge the time spread and freight exposure on the different contracts.

35.8.2 Hedging instruments

When applicable, the Group designates derivative hedging instruments as fair value hedges in relationship to the associated hedged items:

- The maturity profile of the hedging instrument used for hedging the designated risk components associated with the tolling agreements varies from one month to four years.
- The maturity profile of the hedging instruments used for hedging the designated risk components associated with the transportation agreement varies from one month to five years.
- The maturity profile of the hedging instruments used for the hedging of the offtake agreement varies from one month to five years.
- The maturity profile of the hedging instruments used for hedging the storage and bareboat charter agreements varies from one month to three years.

The designated hedge derivatives are accounted for at fair value through profit and loss. The identified hedged items are accounted for at fair value and recognised in cost of sales within the statement of income. The fair value is reflected in the statement of financial position as either a recognised asset or liability. The fair value is determined using benchmarks best representing the designated hedged item. Specifically in the case of LNG, the fair value of the hedged item also considers unobservable inputs.

35.8.3 Economic relationship

IFRS 9 requires the existence of an economic relationship between the hedged item and the hedging instrument. At designation and at the start of each reporting period, critical terms of both hedged items and hedge instruments in a hedge relationship are reviewed to ascertain the expectation that the value of the hedging instrument and the value of the hedged item would move into opposite directions as a result of the common underlying and therefore meeting the risk management objective of the hedge relationship.

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35.8.4 Hedge effectiveness assessment

At each reporting date or on significant changes in circumstances a quantitative hedge effectiveness assessment is performed. The fair values of both hedged items and hedging instruments are measured and the net difference of the changes is the hedge ineffectiveness amount. The hedge ineffectiveness amount is analysed by its various sources (for example: basis differences, location differences, timing differences, quantity or notional amount differences, currency basis and forward points, credit risk or other risks) where applicable. Specific factors that may impact ineffectiveness are the mismatch in the designated hedge period and the maturity period of the hedging instrument and a differential of the various benchmarks for the pricing of the hedging instruments and the hedged items. In the case of LNG, the hedged item designated includes foreign currency exposure. However, the foreign currency hedges have not been designated into the hedge relationship, giving rise to additional, unintentional ineffectiveness. The fair value of the foreign exchange hedges that have not been designated can be seen in the table below.

The fair value adjustments on the non-financial hedged items are presented in the balance sheet under the following categories:

	30 September 2020		30 September 2019	
	USD'M	USD'M	USD'M	USD'M
	Other non-current assets (Note 21)	Other current assets (Note 25)	Other current assets (Note 21)	Other current assets (Note 25)
Non-financial hedged items – Tolling agreements	**76.9**	**61.8**	145.6	102.0
Non-financial hedged items – Transportation agreements	**–**	**–**	–	–
Non-financial hedged items – LNG contracts	**–**	**0.7**	68.5	–
Non-financial hedged items – Bareboat charter agreements	**–**	**2.0**	2.4	18.1
Non-financial hedged items – Storage agreements	**–**	**–**	–	–
Closing balance of the hedged item	**76.9**	**64.5**	216.5	120.1

	30 September 2020		30 September 2019	
	USD'M	USD'M	USD'M	USD'M
	Other non-current liabilities (Note 31)	Other current liabilities (Note 33)	Other non-current liabilities (Note 31)	Other current liabilities (Note 33)
Non-financial hedged items – Tolling agreements	**–**	**–**	–	–
Non-financial hedged items – Transportation agreements	**163.2**	**270.3**	148.8	37.6
Non-financial hedged items – LNG contracts	**159.1**	**151.4**	22.8	26.5
Non-financial hedged items – Bareboat charter agreements	**1.0**	**28.7**	–	–
Non-financial hedged items – Storage agreements	**2.5**	**9.1**	–	–
Closing balance of the hedged item	**325.7**	**459.5**	171.6	64.1
Net balance of the hedged item (+ = asset/ - = liability)	**(643.8)**		100.9	

The following table summarises the movements in the non-financial hedged items and the related derivatives recognised in the statement of income:

Fair value hedge accounting	30 September 2020 USD'M	30 September 2019 USD'M
Opening balances of the derivatives marked as hedges	**(170.0)**	(1,897.9)
Fair value movement included in the hedge relationship	**760.7**	1,281.4
Hedges for which hedge relationship matured	**(27.1)**	330.3
Hedges not designated in hedge relationship	**(92.5)**	116.2
Closing balance of the derivatives marked as hedges	**471.1**	(170.0)
Opening balance of the hedged item	**100.9**	1,749.5
Fair value movement included in the hedge relationship	**(684.8)**	(1,333.3)
Release of fair value adjustment due to matured hedge relationship	**(60.0)**	(315.3)
Closing balance of the hedged item	**(643.9)**	100.9
Lifetime to date net gain/(loss)	**(172.8)**	(69.1)
Year to date net gain/(loss)	**(103.7)**	79.3
Ineffectiveness year-to-date	**75.9**	(51.9)

35.9 Capital management

The Group's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

The Company's immediate parent, Trafigura Beheer B.V., is exclusively owned by its employees. This shareholding arrangement leads to an alignment of the long-term interests of the Group and its management team. By virtue of having its own capital at risk, senior management is incentivised to take a long-term view of the Group's overall performance and to protect its capital.

The Group's capital management is aimed at ensuring that the Group meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the lenders to immediately call loans and borrowings. There have been no breaches in the financial covenants of any loans and borrowing in the current period.

The Group monitors its capital adequacy using an adjusted debt -to-equity ratio, which is adjusted total debt divided by the Group's equity. For this purpose, the adjusted debt metric represents the Group's total non-current and current debt less cash, deposits, readily marketable inventories (including purchased and pre-paid inventories which are being released), debt related to the Group's receivables securitisation programme and the non-recourse portion of loans from third parties.

The Company's long-term average target adjusted debt-to-equity ratio is 1.0x. The Company's adjusted net debt-to-equity ratio at the end of the reporting period was as follows:

	30 September 2020 USD'M	30 September 2019 USD'M
Non-current loans and borrowings	**7,070.1**	8,492.1
Current loans and borrowings	**25,783.5**	22,455.5
Total debt	**32,853.6**	30,947.6
Adjustments		
Cash and cash equivalents	**5,757.0**	6,267.2
Deposits	**466.0**	374.2
Inventories (including purchased and pre-paid inventories)	**20,921.8**	14,137.2
Receivables securitisation debt	**2,750.6**	4,422.1
Non-recourse debt	**198.4**	437.2
Adjusted total debt	**2,759.9**	5,309.7
Group equity	**7,789.9**	6,804.7
Adjusted debt to Group equity ratio at the end of the period	**0.35**	0.78

35.10 Fair value

35.10.1 Fair values versus carrying amounts

The fair values of inventories, financial assets and liabilities, together with the carrying amounts shown in the statement of financial position, are as follows:

30 September 2020	Carrying value USD'M	Fair value USD'M
Assets		
Listed equity securities – Fair value through OCI	3.9	3.9
Listed equity securities – Fair value through profit or loss	25.3	25.3
Listed debt securities – Fair value through profit or loss	220.9	220.9
Unlisted equity investments – Fair value through profit or loss	34.3	34.3
Unlisted equity investments – Fair value through OCI	232.7	232.7
Loans receivable (*)	694.4	730.0
Inventories	20,177.6	20,177.6
Trade and other receivables (*)	15,245.1	15,251.2
Non-financial hedged items	141.4	141.4
Derivatives	1,099.1	1,099.1
Deposits (*)	466.0	466.0
Cash and cash equivalents (*)	5,757.0	5,757.0
Total financial assets and inventories	**44,097.7**	**44,139.4**
Liabilities		
Loans and borrowings		
Floating rate borrowings (*)	30,330.0	30,330.0
Fixed-rate borrowings	2,523.6	2,585.1
Trade and other payables (*)	11,081.0	11,081.0
Non-financial hedged items	785.2	785.2
Derivatives	830.9	830.9
Total financial liabilities	**45,550.7**	**45,612.1**

30 September 2019	Carrying value USD'M	Fair value USD'M
Assets		
Listed equity securities – Fair value through OCI	28.8	28.8
Listed equity securities – Fair value through profit or loss	342.1	342.1
Listed debt securities – Fair value through profit or loss	345.5	345.5
Unlisted equity investments – Fair value through profit or loss	53.9	53.9
Unlisted equity investments – Fair value through OCI	233.4	233.4
Loans receivable (*)	521.4	552.8
Inventories	13,435.0	13,435.0
Trade and other receivables (*)	18,516.5	18,527.5
Non-financial hedged items	336.6	336.6
Derivatives	1,356.0	1,356.0
Deposits (*)	374.2	374.2
Cash and cash equivalents (*)	6,267.2	6,267.2
Total financial assets and inventories	**41,810.6**	**41,853.0**
Liabilities		
Loans and borrowings		
Floating rate borrowings (*)	27,886.1	27,886.1
Fixed-rate borrowings	3,041.7	3,110.9
Finance lease and purchase contract (*)	19.8	19.8
Trade and other payables (*)	13,935.2	13,935.2
Non-financial hedged items	235.7	235.7
Derivatives	1,119.6	1,119.6
Total financial liabilities	**46,238.1**	**46,307.3**

* Management has determined that these carrying amounts reasonably approximate their fair values because these are mostly short-term in nature and are re-priced regularly.

Increases in fair value of derivatives are predominantly caused by physical forward contracts. The gains booked on these contracts are offset by similar losses on associated cash settled hedge derivatives, meaning no net profit has been taken on these forward physical contracts.

Offsetting of financial assets and liabilities

In accordance with IAS 32, the Group reports financial assets and liabilities on a net basis in the consolidated statement of financial position only if there is a legally enforceable right to set off the recognised amounts and there is intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. The financial assets and liabilities subject to offsetting, enforceable master netting and similar agreements as at 30 September 2020 and 2019 were as follows:

	Amounts eligible for set off under netting agreements			Amounts not subject to netting agreements	Net amounts presented in the statement of financial position
	Gross amount	Amounts offset	Net amount		
2020	USD'M	USD'M	USD'M	USD'M	USD'M
Related parties	921.9	(76.7)	845.2	–	845.2
Derivative assets	2,590.4	(2,111.6)	478.8	620.3	1,099.1
Related parties	(197.3)	76.7	(120.6)	–	(120.6)
Derivative liabilities	(2,382.7)	2,111.6	(271.1)	(559.8)	(830.9)

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2019	Gross amount USD'M	Amounts offset USD'M	Net amount USD'M	Amounts not subject to netting agreements USD'M	Net amounts presented in the statement of financial position USD'M
	Amounts eligible for set off under netting agreements				
Related parties	1,526.7	(77.5)	1,449.2	–	1,449.2
Derivative assets	1,836.7	(1,156.7)	680.0	676.0	1,356.0
Related parties	(122.7)	77.5	(45.2)	–	(45.2)
Derivative liabilities	(1,617.8)	1,156.7	(461.1)	(658.5)	(1,119.6)

For the financial assets and liabilities subject to enforceable master netting or similar arrangements above, each agreement between the Group and the counterparty allows for net settlement of the relevant financial assets and liabilities when both elect to settle on a net basis. In the absence of such an election, financial assets and liabilities may be settled on a gross basis, however, each party to the master netting or similar agreement will have the option to settle all such amounts on a net basis in the event of default of the other party.

35.10.2 Fair value hierarchy

The table below analyses financial instruments and other assets and liabilities carried at fair value, by valuation method. The different levels have been defined as follows:

- **Level 1:** quoted prices (unadjusted) in active markets for identical assets or liabilities.
- **Level 2:** inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).
- **Level 3:** inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Regarding financial instruments: Level 1 classifications primarily include futures with a maturity of less than one year. Level 2 classifications primarily include swaps and physical forward transactions which derive their fair value primarily from exchange quotes and readily observable broker quotes. Level 3 classifications primarily include physical forward transactions which derive their fair value predominately from calculations that use broker quotes and applicable market-based estimates surrounding location, quality and credit differentials. In circumstances where Trafigura cannot verify fair value with observable market inputs (Level 3 fair values), it is possible that a different valuation model could produce a materially different estimate of fair value.

It is Trafigura's policy to hedge significant market risk. Therefore sensitivity to fair value movements is limited. Trafigura manages its market risk using Value at Risk (VaR), as disclosed in Note 35.2.

Other financial assets and inventories	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2020				
Listed equity securities – Fair value through OCI	3.9	–	–	**3.9**
Listed equity securities – Fair value through profit or loss	25.3	–	–	**25.3**
Listed debt securities – Fair value through profit or loss	–	–	220.9	**220.9**
Unlisted equity investments – Fair value through profit or loss	–	–	34.3	**34.3**
Unlisted equity investments – Fair value through OCI	–	–	232.7	**232.7**
Futures	–	–	–	**–**
OTC derivatives	–	202.3	1.0	**203.4**
Physical forwards	–	6.5	414.7	**421.1**
Cross-currency swaps	–	7.3	–	**7.3**
Interest rate swaps	–	21.2	–	**21.2**
Non-financial hedged items	–	140.7	0.7	**141.4**
Other financial derivatives	–	446.0	–	**446.0**
Inventories	–	20,177.6	–	**20,177.6**
Total	**29.2**	**21,001.7**	**904.3**	**21,935.2**

Other financial liabilities	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2020				
Futures	61.3	–	–	**61.3**
OTC derivatives	–	144.4	99.3	**243.7**
Physical forwards	–	4.6	309.6	**314.2**
Cross-currency swaps	–	8.6	–	**8.6**
Interest rate swaps	–	36.3	–	**36.3**
Non-financial hedged items	–	474.7	310.4	**785.2**
Other financial derivatives	–	166.8	–	**166.8**
Fixed-rate borrowings	–	2,523.6	–	**2,523.6**
Total	**61.3**	**3,359.1**	**719.3**	**4,139.7**
Net other financial assets/(liabilities)	**(32.1)**	**17,642.5**	**185.0**	**17,795.5**

Other financial assets and inventories	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2019				
Listed equity securities – Fair value through OCI	28.8	–	–	**28.8**
Listed equity securities – Fair value through profit or loss	342.1	–	–	**342.1**
Listed debt securities – Fair value through profit or loss	–	–	345.5	**345.5**
Unlisted equity investments – Fair value through profit or loss	–	–	53.9	**53.9**
Unlisted equity investments – Fair value through OCI	–	–	233.4	**233.4**
Futures	11.3	–	–	**11.3**
OTC derivatives	–	154.4	41.6	**196.0**
Physical forwards	–	18.3	435.9	**454.2**
Cross-currency swaps	–	5.7	–	**5.7**
Interest rate swaps	–	62.5	–	**62.5**
Non-financial hedged items	–	268.1	68.5	**336.6**
Other financial derivatives	–	626.3	–	**626.3**
Inventories		13,435.0	–	**13,435.0**
Total	**382.2**	**14,570.3**	**1,178.8**	**16,131.3**

Other financial liabilities	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	Total USD'M
30 September 2019				
Futures	1.5	–	–	**1.5**
OTC derivatives	–	235.7	49.7	**285.4**
Physical forwards	–	11.5	378.1	**389.6**
Cross-currency swaps	–	80.0	–	**80.0**
Interest rate swaps	–	7.9	–	**7.9**
Non-financial hedged items	–	186.4	49.3	**235.7**
Other financial derivatives	–	355.1	–	**355.1**
Fixed-rate borrowings	–	3,041.7	–	**3,041.7**
Total	**1.5**	**3,918.3**	**477.1**	**4,396.9**
Net other financial assets/(liabilities)	**380.7**	**10,652.0**	**701.8**	**11,734.4**

The overview of the fair value hierarchy and applied valuation methods can be specified as follows:

Listed equity securities – Fair value through OCI			2020 USD'M	2019 USD'M
	– Level 1	Assets	**3.9**	28.8
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices in an active market.			
Significant unobservable inputs:	None.			

Listed equity securities – Fair value through profit and loss			2020 USD'M	2019 USD'M
	– Level 1	Assets	**25.3**	342.1
		Liabilities	**–**	–
Valuation techniques and key inputs:	Quoted prices in an active market.			
Significant unobservable inputs:	None.			

Futures			2020 USD'M	2019 USD'M
	– Level 1	Assets	**–**	11.3
		Liabilities	**61.3**	1.5
Valuation techniques and key inputs:	Quoted prices in an active market.			
Significant unobservable inputs:	None.			

OTC derivatives			2020 USD'M	2019 USD'M
	– Level 2	Assets	**202.3**	154.4
		Liabilities	**144.4**	235.7
Valuation techniques and key inputs:	Reference prices. Inputs include observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities.			
Significant unobservable inputs:	None.			

Physical forwards			2020 USD'M	2019 USD'M
	– Level 2	Assets	**6.5**	18.3
		Liabilities	**4.6**	11.5
Valuation techniques and key inputs:	Reference prices. Inputs include observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities.			
Significant unobservable inputs:	None.			

Cross-currency swaps			2020 USD'M	2019 USD'M
	– Level 2	Assets	**7.3**	5.7
		Liabilities	**8.6**	80.0
Valuation techniques and key inputs:	Discounted cash flow model. Inputs include observable quoted prices sourced from exchanges or recent traded price indices in an active market for identical assets or liabilities. Price are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.			
Significant unobservable inputs:	None.			

Interest rate swaps			2020 USD'M	2019 USD'M
	– Level 2	Assets	**21.2**	62.5
		Liabilities	**36.3**	7.9
Valuation techniques and key inputs:	Discounted cash flow model. Inputs include observable quoted prices sourced from exchanges or recent traded price indices in an active market for identical assets or liabilities. Price are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.			
Significant unobservable inputs:	None.			

Non-financial hedged items			2020 USD'M	2019 USD'M
	– Level 2	Assets	**140.7**	268.1
		Liabilities	**474.7**	186.4
Valuation techniques and key inputs:	Reference prices. Inputs include observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities.			
Significant unobservable inputs:	None.			

Other financial derivatives			2020 USD'M	2019 USD'M
	- Level 2	Assets	**446.0**	626.3
		Liabilities	**166.8**	355.1
Valuation techniques and key inputs:	Discounted cash flow model. Inputs include observable quoted prices sourced from exchanges or traded reference indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.			
Significant unobservable inputs:	None.			

Inventories			2020 USD'M	2019 USD'M
	– Level 2	Assets	**20,177.6**	13,435.0
		Liabilities	**–**	–
Valuation techniques and key inputs:	Reference prices. Quoted prices in an active market, adjusted with a premium/discount for quality and/or location.			
Significant unobservable inputs:	None.			

Fixed-rate borrowings			2020 USD'M	2019 USD'M
	– Level 2	Assets	**–**	–
		Liabilities	**2,523.6**	3,041.7
Valuation techniques and key inputs:	Discounted cash flow model. Cash flows discounted at current borrowing rates for similar instruments.			
Significant unobservable inputs:	None.			

Listed debt securities – Fair value through profit or loss			2020 USD'M	2019 USD'M
	– Level 3	Assets	**220.9**	345.5
		Liabilities	**–**	–
Valuation techniques and key inputs:	Discounted cash flow model. The resultant asset is a discounted cash flow of the underlying throughput.			
Significant unobservable inputs:	– Forecast throughput – Discount rates using weighted average cost of capital – Market illiquidity – Operating cost and capital expenditures			

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Unlisted equity investments – Fair value through profit or loss			2020 USD'M	2019 USD'M
	– Level 3	Assets	**34.3**	53.9
		Liabilities	**–**	–
Valuation techniques and key inputs:	Valuations obtained from the asset managers of the funds.			
Significant unobservable inputs:	– Market illiquidity			

Unlisted equity investments – Fair value through OCI			2020 USD'M	2019 USD'M
	– Level 3	Assets	**232.7**	233.4
		Liabilities	**–**	–
Valuation techniques and key inputs:	Valuations obtained from the asset managers of the funds.			
Significant unobservable inputs:	– Market illiquidity			

OTC derivatives			2020 USD'M	2019 USD'M
	– Level 3	Assets	**1.0**	41.6
		Liabilities	**99.3**	49.7
Valuation techniques and key inputs:	Discounted valuation of cashflows generated based on unobservable inputs.			
Significant unobservable inputs:	Total load consumption forecast, scaling factor.			

Physical forwards			2020 USD'M	2019 USD'M
	– Level 3	Assets	**414.7**	435.9
		Liabilities	**309.6**	378.1
Valuation techniques and key inputs:	Internal valuation model Key input is the definition of the observable risk position which forms the basis for the valuation of these physical forwards.			
Significant unobservable inputs:	The definition of the observable risk position.			

Non-financial hedged items			2020 USD'M	2019 USD'M
	– Level 3	Assets	**0.7**	68.5
		Liabilities	**310.4**	49.3
Valuation techniques and key inputs:	Internal valuation model. Key input is the market liquefaction fee curve that is defined using observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities.			
Significant unobservable inputs:	Market liquefaction fee curve Liquefaction ratio			

The movements in the Level 3 hierarchy can be summarised as follows:

USD'M	Physical forwards/ Derivatives	Equity/ Debt securities	Firm commitments	Total
1 October 2019	**49.7**	**632.8**	**19.2**	**701.7**
Total gain/(loss) recognised in statement of income	(3.5)	(133.3)	(469.9)	(606.7)
Total gain/(loss) recognised in OCI	(63.8)	(31.9)	–	(95.8)
Invested	–	31.2	–	31.2
Disposals	–	(10.9)	–	(10.9)
Total realised	24.5	–	140.9	165.4
30 September 2020	**6.9**	**487.9**	**(309.8)**	**185.0**

USD'M	Physical forwards/ Derivatives	Equity/Debt securities	Non-financial hedged items	Total
1 October 2018	**65.9**	**661.1**	**646.5**	**1,373.5**
Total gain/(loss) recognised in statement of income	15.8	(130.0)	(679.6)	(793.8)
Total gain/(loss) recognised in OCI	–	(2.4)	–	(2.4)
Invested	–	112.0	–	112.0
Disposals	–	(7.9)	–	(7.9)
Total realised	(32.0)	–	52.3	20.3
30 September 2019	**49.7**	**632.8**	**19.2**	**701.7**

There have been no transfers between fair value hierarchy levels in the financial year ended 30 September 2020. Materially all Level 3 physical forwards are settled in the next year. See Note 20 for equity/debt securities.

36. Employee benefits

36.1 Equity participation plan

The immediate parent of the Company, Trafigura Beheer B.V., has an equity participation plan (EPP) that is open to employees of the Group. Shares issued to employees are preference shares of Trafigura Beheer B.V., which give rights to economic benefits with limited voting rights. The controlling shareholders of the Group, represented by the Board of Directors of Trafigura Control Holdings Pte. Ltd., a parent company of Trafigura Beheer B.V., in consultation with the Board of Directors of the Company, decide on the share awards to be issued to employees. Annual remuneration (which includes the equity participation awards) is subject to review by the remuneration committee of the Group.

The value of the shares is based on the net asset value of an ordinary share as set out in the Articles of Association of Trafigura Beheer B.V., which management believe is a fair approximation of the fair value. Shares awarded under the EPP may vest immediately or over a period of several years.

Employees do not have the right to freely sell shares that have vested unless Trafigura Control Holdings Pte. Ltd. has granted approval and has refrained from its right to nominate a prospective purchaser and make a purchase offer. Upon termination of employment, employees must transfer all of their shares at the direction of Trafigura Control Holdings Pte. Ltd. or hold the shares subject to further directions of Trafigura Control Holdings Pte. Ltd.

Neither Trafigura Beheer B.V. nor the Group have a legal or constructive obligation to settle the shares held by employees in cash. If employment is ceased prior to the end of the vesting period, the shares will be forfeited unless otherwise determined by Trafigura Control Holdings Pte. Ltd.

The Group's EPP is classified as an equity-settled plan in the Group's financial statements; the fair value of the shares granted, determined at the grant date, is recorded in the statement of income rateably over the vesting period of the shares.

During 2020, 92,596 immediately vesting shares were granted to employees representing a value of USD50.4 million (2019: 14,647 shares representing a value of USD30.8 million) and 163,938 shares were granted with a vesting period of one to five years representing a value of USD89.4 million (2019: 70,639 shares representing a value of USD148.8 million).

Compensation in respect of share-based payments recognised in staff costs for the financial year ended 30 September 2020 amounted to USD130.2 million (2019: USD108.3 million).

Unrecognised staff costs in respect of rateably vesting shares expected to be recognised from 2021 to 2024 amount to USD151.7 million at 30 September 2020 (2019: USD150.8 million for the period from 2020 to 2023).

36.2 Staff costs

	2020 USD'M	2019 USD'M
Salaries and bonuses	**585.5**	457.1
Social security costs	**41.4**	35.6
Pension costs	**15.9**	12.7
Share-based payments	**130.2**	108.3
Reported under general and administrative expenses	**773.0**	613.7
Reported under cost of sales	**520.6**	79.4
Staff costs	**1,293.6**	693.1

The staff costs increase is due to the full-year consolidation of Nyrstar.

The average number of employees split geographically is depicted below:

2020	Oil & Petroleum FTE	Metals & Minerals FTE	Corporate and other FTE	Total FTE
North, Central and South America	1,054	2,635	291	**3,980**
Europe and Africa	223	1,853	255	**2,331**
Asia, Middle East and Australia	279	1,578	451	**2,308**
Total	**1,556**	**6,066**	**997**	**8,619**

2019	Oil & Petroleum FTE	Metals & Minerals FTE	Corporate and other FTE	Total FTE
North, Central and South America	965	1,490	286	**2,741**
Europe and Africa	204	664	254	**1,122**
Asia, Middle East and Australia	269	550	424	**1,243**
Total	**1,438**	**2,704**	**964**	**5,106**

The 2020 increase in staff costs is primarily due to the full-year consolidation of Nyrstar.

37. Related parties

In the normal course of business, the Group enters into various transactions with related parties, including fixed-price commitments to sell and to purchase commodities, forward sale and purchase contracts, agency agreements and management service agreements. Outstanding balances at period end are unsecured and settlement occurs in cash. There have been no guarantees provided or received for any related-party receivables or payables.

All transactions between the Company and its subsidiaries are eliminated on consolidation along with any unrealised profits and losses between its subsidiaries, associates and joint ventures.

37.1 Transactions with key management personnel

37.1.1 Key management personnel compensation

In addition to their salaries, the Group also provides non-cash benefits to directors and executive officers. Executive officers also participate in the Group's share participation programme (refer to Note 35). Compensation of key management personnel, including all members of the Board of Directors and the Management Committee, comprised of the following:

	2020 USD'M	2019 USD'M
Short-term employee benefits	**11.4**	5.0
Post-employment benefits	**0.5**	0.5
Share-based payments	**23.5**	27.9
Total	**35.4**	33.4

37.1.2 Key management personnel and director transactions

As at 30 September 2020, loans receivable from the members of the Board of Directors and the Management Committee total USD20.8 million (2019: USD19.0 million). Interest is charged on the loans at approximately Libor + 1.5 percent and the loans are repayable within the one to three year bracket.

F. Notes to consolidated financial statements

37.2 Other related-party transactions

Related-party receivables/(payables)	2020 USD'M	2019 USD'M
Trafigura Beheer B.V.	**11.7**	(8.3)
Puma Energy Holdings Pte. Ltd.	**1,451.8**	1,369.0
Farringford N.V.	**47.6**	78.4
Beheer Malta Ltd.	**(10.5)**	(9.2)
Ecore B.V.	**1.0**	1.1
Empresa Minera del Caribe S.A. (Emincar)	**253.9**	258.1
Jinchuan Group Co. Ltd.	**223.4**	187.3
Minas de Aguas Teñidas, S.A.U (MATSA)	**(74.3)**	(28.4)
Impala Terminals Group S.à r.l. (previously known as Simba Holding S.à r.l.)	**(3.1)**	3.4
Nayara Energy Limited	**184.5**	276.5
Trafigura Control Holdings Pte. Ltd.	**0.9**	–
Others	**(139.3)**	121.3
Total	**1,947.6**	2,249.2

	2020 USD'M	2019 USD'M
Sales	**7,333.7**	10,097.8
Purchases	**3,035.2**	3,417.7
Interest income	**77.8**	93.4
Cost recharges	**12.1**	38.5

Transactions between related parties are made on commercial terms.

The nature of the relationships and the nature of transactions entered into with related parties are detailed in the table below:

Party	Nature of relationship	Nature of transaction
Beheer Malta Ltd.	Parent company	Buy back of prefence shares
Ecore B.V.	Cousin group	Cost recharges, trading and hedging
Empresa Minera del Caribe S.A. (Emincar)	Equity-accounted investee	Financing and trading agreement
Farringford N.V.	Parent company	Loans and cost recharges
Impala Terminals Group S.à r.l. (previously known as Simba Holding S.à r.l.)	Equity-accounted investee	Multimodal logistic services
Jinchuan Group Co. Ltd.	Equity-accounted investee	Trading agreement
Minas de Aguas Teñidas, S.A.U (MATSA)	Equity-accounted investee	Financing and trading agreement
Nayara Energy Limited	Equity-accounted investee	Financing and trading agreement
Porto Sudeste do Brasil S.A.	Equity-accounted investee	Loans and cost recharges
Puma Energy Holdings Pte. Ltd.	Equity-accounted investee	Financing and trading agreement
Trafigura Beheer B.V.	Parent company	Loans and cost recharges
Trafigura Control Holding SARL	Parent company	Buy back of prefence shares
Trafigura Control Holdings Pte. Ltd.	Parent company	Buy back of prefence shares

38. Hyperinflationary economies

With effect from 1 July 2018, the Argentine economy is considered to be hyperinflationary in accordance with the criteria in IAS 29, Financial reporting in hyperinflationary economies. Accordingly, the financial statements include restatements for changes in the general purchasing power of the Argentine peso. These restatements are made for all Group entities that have the Argentine peso as functional currency.

On the application of IAS 29 the Group used a conversion coefficient derived from official wholesale price and consumer price indices published by the National Institute of Statistics and Censuses (INDEC, in its Spanish acronym). The index rates and corresponding conversion coefficients applied are as follows:

Year	Index, % (December 2010=100)	Conversion coefficient
30 September 2014	182.0	564.4
30 September 2015	205.6	499.5
30 September 2016	288.6	355.8
30 September 2017	347.8	295.2
30 September 2018	488.7	210.1
30 September 2019	751.6	136.6
30 September 2020	1,026.9	100.0

Monetary assets and liabilities are not restated because they are already expressed in terms of the monetary unit current as at 30 September 2020. Non-monetary assets and liabilities (items which are not already expressed in terms of the monetary unit as at 30 September 2020) are restated by applying the above index.

The impact of 12.8 million has been recorded in other comprehensive income. The pre-tax loss for the year of USD3.6 million is included in finance income (2019: USD84.7 million).

39. Subsequent events

There are no significant subsequent events, which require disclosure.

40. Consolidated subsidiaries and associates

For entities where legal shareholding is less than 50 percent, the Group has consolidated based on the definition of control under IFRS. Certain entities with a percentage of effective economic interest below 50 percent are held through intermediate holding companies controlled by the Group.

Principal consolidated operating subsidiaries	Location	% Owned 2020	% Owned 2019
Boyaca Navigation Inc.	Panama	100.0%	100.0%
C.I. Trafigura Petroleum Colombia S.A.S	Colombia	100.0%	100.0%
Catalina Huanca Sociedad Minera S.A.C.	Peru	100.0%	100.0%
DT Trading Ltd.	Bahamas	50.0%	50.0%
DTS Commercial Pte. Ltd.	Singapore	50.0%	50.0%
DTS Refining Pte. Ltd.	Singapore	50.0%	50.0%
DTS Shipping Ventures Pte. Ltd.	Singapore	50.0%	50.0%
Edenfield Procurement DMCC	United Arab Emirates	100.0%	100.0%
Fangchenggang Guo Tong Import and Export Co. Ltd.	China	100.0%	100.0%
Galena Asset Management B.V.	The Netherlands	100.0%	100.0%
Galena Asset Management SA	Switzerland	100.0%	100.0%
Iberian Minerals Corp.	Switzerland	100.0%	100.0%
Impala Holdings Limited	Malta	100.0%	100.0%
Impala Middle East General Warehousing L.L.C.	United Arab Emirates	100.0%	100.0%
Impala Terminals Barrancabermeja S.A.	Colombia	100.0%	100.0%
Impala Terminals Burnside LLC	United States	100.0%	100.0%
Impala Terminals Colombia S.A.S	Colombia	100.0%	100.0%
Impala Terminals DRC SARL	The Democratic Republic of Congo	100.0%	100.0%
Impala Terminals Middle East FZE	United Arab Emirates	100.0%	100.0%
Impala Terminals UK Limited	United Kingdom	100.0%	100.0%
Impala Warehousing and Logistics (Shanghai) Co., Ltd	China	100.0%	100.0%
IWL (Luxembourg) S.à r.l.	Luxembourg	100.0%	100.0%
IWL Capital LLC	Marshall Islands	100.0%	100.0%
IWL Holding B.V.	The Netherlands	100.0%	100.0%
IWL Holdings (Luxembourg) S.à r.l.	Luxembourg	100.0%	100.0%
IWL River Inc.	Panama	100.0%	100.0%
LYKOS India Private Limited	India	100.0%	100.0%
NGL Equipments, S.A. de C.V.	Mexico	100.0%	100.0%
Ningbo Trans-Coal Trading Co., Ltd.	China	100.0%	100.0%
Petromining S.A.	Argentina	100.0%	100.0%
Seal Sands Gas Transportation Limited	United Kingdom	100.0%	100.0%
TCPU LLC (Formerly TCPU Inc.)	United States	100.0%	100.0%
Teesside Gasport Limited	United Kingdom	100.0%	100.0%
Trafigura Argentina S.A.	Argentina	100.0%	100.0%
Cortes Holding S.a.r.l. (Formerly Cortes Holding B.V.)	Luxembourg	100.0%	100.0%
Trafigura Canada General Partnership	Canada	100.0%	100.0%
Trafigura Chile Limitada	Chile	100.0%	100.0%
C.I. Trafigura Coal Colombia S.A.S. (Formerly Trafigura Coal Colombia S.A.S.)	Colombia	100.0%	100.0%
Trafigura Derivatives Limited	United Kingdom	100.0%	100.0%
Trafigura Energy Colombia S.A.S.	Colombia	100.0%	100.0%
Trafigura Eurasia LLC	Russian Federation	100.0%	100.0%
Trafigura Funding S.A.	Luxembourg	100.0%	100.0%
Trafigura Holding GmbH	Switzerland	100.0%	100.0%
Trafigura Holdings Limited	Malta	100.0%	100.0%
Trafigura Holdings Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura India Private Limited	India	100.0%	100.0%
Trafigura Investment (China) Co., Ltd.	China	100.0%	100.0%
Trafigura Limited	United Kingdom	100.0%	100.0%
Trafigura Maritime Logistics Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Maritime Ventures Limited	Malta	100.0%	100.0%
Trafigura Marketing Inc.	United States	100.0%	100.0%
Trafigura Marketing Ltd.	Canada	100.0%	100.0%
Trafigura Metales Basicos S.A.C.	Peru	100.0%	100.0%
Trafigura Mexico, S.A. de C.V.	Mexico	100.0%	100.0%

Principal consolidated operating subsidiaries	Location	% Owned 2020	% Owned 2019
Trafigura Mongolia LLC	Mongolia	100.0%	100.0%
Trafigura Nat Gas Limited	Malta	100.0%	100.0%
Trafigura Overseas Projects Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura PE Holding Limited	Malta	100.0%	100.0%
Trafigura Peru S.A.C.	Peru	100.0%	100.0%
Trafigura Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Services Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Services South Africa (Pty) Ltd.	South Africa	100.0%	100.0%
Trafigura Services Australia Pty Ltd	Australia	100.0%	100.0%
Trafigura Terminals (Perth) Pty Ltd	Australia	100.0%	100.0%
TPTE Holding Limited (Formerly TPTE Holding B.V.)	Malta	100.0%	100.0%
Trafigura Trading (Europe) Sàrl	Switzerland	100.0%	100.0%
Trafigura Trading LLC	United States	100.0%	100.0%
Trafigura Trading (UK) Limited	United Kingdom	100.0%	-
Trafigura Trading Yangshan Co., Ltd.	China	100.0%	100.0%
Trafigura Ukraine LLC	Ukraine	100.0%	100.0%
Trafigura US Inc.	United States	100.0%	100.0%
Trafigura Ventures IX B.V.	The Netherlands	100.0%	100.0%
Trafigura Ventures Trading Ltd.	Mauritius	100.0%	100.0%
Trafigura Ventures V B.V.	The Netherlands	100.0%	100.0%
Trafigura Ventures VIII B.V.	The Netherlands	100.0%	100.0%
Urion Holdings (Malta) Limited	Malta	100.0%	100.0%
Urion Mining International B.V.	The Netherlands	100.0%	100.0%
Cloudbreak Investments S.à r.l.	Luxembourg	100.0%	100.0%
Cortes Investments S.à r.l.	Luxembourg	100.0%	100.0%
Nyrstar Holdings PLC	Malta	100.0%	100.0%
Pash Kita Limited	United Kingdom	85.0%	85.0%
Shipstern Holdings S.à r.l.	Luxembourg	100.0%	100.0%
Trafigura Asia Trading Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Holdings S.à r.l.	Luxembourg	100.0%	100.0%
Trafigura Smelting Investments Limited	Malta	100.0%	100.0%
Impala Terminals Group 2 S.à r.l.	Luxembourg	50.0%	50.0%
Impala Terminals Group S.à r.l.	Luxembourg	50.0%	50.0%
Nyrstar Hobart Pty Ltd	Australia	98.5%	98.5%
Nyrstar Port Pirie Pty Ltd	Australia	98.5%	98.5%
Nyrstar Belgium NV	Belgium	98.5%	98.5%
Breakwater Resources Ltd	Canada	100.0%	98.5%
Nyrstar Canada (Holdings) Ltd	Canada	100.0%	98.5%
Nyrstar Myra Falls Ltd	Canada	100.0%	98.5%
Nyrstar France SAS	France	98.5%	98.5%
Nyrstar Budel BV	The Netherlands	98.5%	98.5%
Nyrstar Netherlands (Holdings) BV	The Netherlands	98.5%	98.5%
Nyrstar Finance International AG	Switzerland	98.5%	98.5%
Nyrstar Sales & Marketing AG	Switzerland	98.5%	98.5%
Nyrstar Clarksville Inc	United States	98.5%	98.5%
Nyrstar Tennessee Mines – Gordonsville LLC	United States	98.5%	98.5%
Nyrstar Tennessee Mines – Strawberry Plains LLC	United States	98.5%	98.5%
NN2 Newco Limited	United Kingdom	98.5%	98.5%
Nyrstar Holdings & Financing Ltd	Malta	98.5%	–

41. Board of Directors

The Board of Directors	
Mark Irwin	José Larocca
Pierre Lorinet	Sipko Schat
Andrew Vickerman	Mike Wainwright
Jeremy Weir	

Singapore, 7 December 2020.

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EXHIBIT C

TRAFIGURA

2016 ANNUAL REPORT

TRAFIGURA GROUP PTE. LTD.

ADVANCING TRADE

FINANCIAL AND BUSINESS HIGHLIGHTS*

$98.1bn
Group revenue
(2015: USD97.2 billion)

264.4mmt
Combined volume
of commodities traded**
(2015: 198.4mmt)

$2.3bn
Gross profit
(2015: USD2.6 billion)

$41.2bn
Total assets
(2015: USD39.1 billion)

65%
Oil and Petroleum Products revenue
as a percentage of Group revenue
(2015: 67 percent)

205.4mmt
Oil and Petroleum Products
total volume traded
(2015: 146.3mmt)

2.3%
Gross profit margin
(2015: 2.7 percent)

$8.5bn
Total non-current assets
(2015: USD8.4 billion)

35%
Metals and Minerals revenue
as a percentage of Group revenue
(2015: 33 percent)

14.9mmt
Metals total volume traded
(2015: 12.8mmt)

$0.975bn
Net profit
(2015: USD1.1 billion)

$5.5bn
Shareholders' equity
(2015: USD5.6 billion)

44.1mmt
Minerals total volume traded
(2015: 39.3mmt)

$1.6bn
EBITDA***
(2015: USD1.9 billion)

4,107
Average number of
employees over year****
(2015: 5,248)

* Trafigura's financial year runs from 1 October 2015 to 30 September 2016.
** Million metric tonnes.
*** EBITDA (earnings before interest, tax, depreciation and amortisation) is operating profit excluding the share in results of equity-accounted investees, depreciation and amortisation, gains/losses on divestments of subsidiaries, equity-accounted investees and other investments, impairment losses and other operating income and expense.
**** Employee numbers exclude MATSA and Porto Sudeste employees as these assets are deconsolidated from Trafigura's balance sheet.

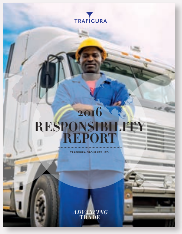
ADVANCING TRADE

Without trade, countries cannot develop, economies cannot grow and international business cannot function. We help make trade happen.

We move physical commodities from places where they are plentiful to where they are most needed – reliably, efficiently and responsibly.

Trafigura has been connecting its customers to the global economy for more than two decades; we are growing prosperity by advancing trade.

CONTENTS



The 2016 Annual Report is complemented by the 2016 Responsibility Report which reflects on Trafigura's progress in implementing responsible business practices and sets out metrics assessing our performance in managing our Health, Safety, Environment and Communities (HSEC) impacts.

For further information please visit www.trafigura.com/responsibility

TRAFIGURA AT A GLANCE

Trafigura's core business is physical trading and logistics; our assets and investments complement and enhance these activities. With 61 offices in 36 countries, Trafigura's network extends to every corner of the globe.

TRADING ACTIVITIES

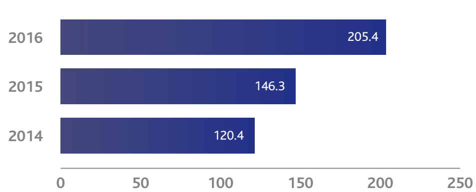
Oil and Petroleum Products

In a fragmented market where no single company has a dominant position, we are one of the world's largest traders by volume of oil and petroleum products. Trafigura is one of the few oil and petroleum products traders with global presence and comprehensive coverage of all major markets. The Oil and Petroleum Products Division is supported by offices across the world including in Beijing, Calgary, Geneva, Houston, Johannesburg, Mexico City, Montevideo, Moscow, Mumbai and Singapore.

205.4mmt

Oil and Petroleum Products volume traded
(2015: 146.3mmt)

DIVISIONAL PERFORMANCE



Oil and Petroleum Products volume traded (mmt)

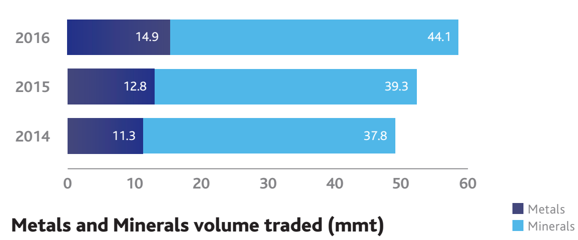
Metals and Minerals

We are one of the world's largest metals and minerals traders. We negotiate offtake agreements with miners and smelters and invest in logistics through our subsidiary, Impala Terminals, to improve market access for our clients. The Metals and Minerals Division is supported by offices across the world including in Geneva, Johannesburg, Lima, Mexico City, Montevideo, Mumbai, Shanghai, Singapore and Stamford.

59.0mmt

Metals and Minerals volume traded
(2015: 52.1mmt)

DIVISIONAL PERFORMANCE



Metals and Minerals volume traded (mmt)

Shipping and Chartering*

Our Shipping and Chartering desk is closely integrated into Trafigura's business model, providing freight services to commodity trading teams internally and trading freight externally in the professional market. Operations are based in regional offices in Athens, Geneva, Houston, Montevideo and Singapore. All post-fixture operations are managed from our Athens office.

3,878

Shipping and Chartering fixtures
(2015: 2,744)

* Financials relevant to Shipping and Chartering are consolidated within Oil and Petroleum Products/Metals and Minerals trading activities.

INDUSTRIAL AND FINANCIAL ASSETS

DT Group
DT Group is a business venture between Trafigura and Cochan Ltd. It develops markets in sub-Saharan Africa, with a particular focus on Angola. It works closely with international and local partners in the logistics, trading and natural resources sectors.

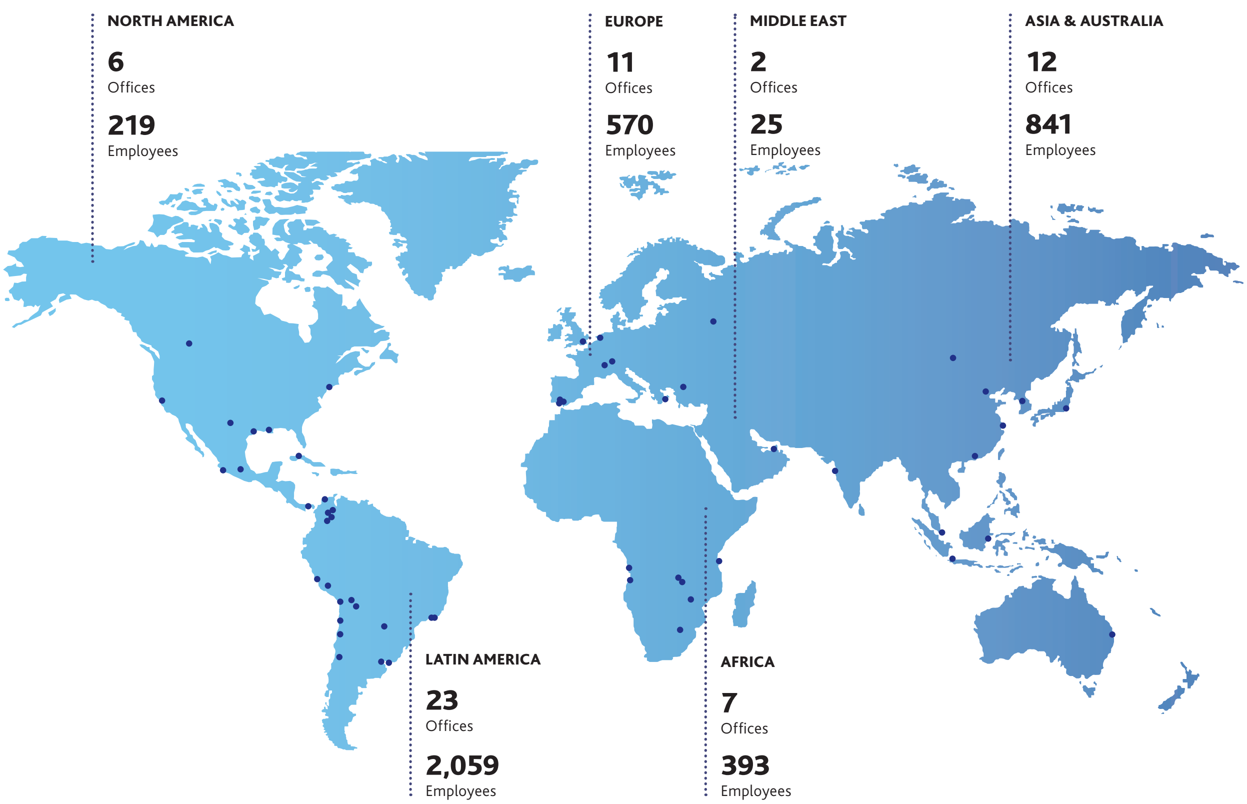
Impala Terminals
Impala Terminals is a multimodal logistics provider focused on export-driven emerging markets. It owns and operates ports, port terminals, warehouses and transport assets. It has particular expertise in providing efficient logistic solutions in challenging environments and hard to reach locations.

Mining Group
The Mining Group manages mining operations, develops projects, conducts technical audits of existing and potential partner projects and provides advisory and support services to Trafigura's trading desks, trading partners and Galena Asset Management.

Galena Asset Management
Galena Asset Management provides investors with specialised alternative investment solutions through its commodity funds. It operates independently, but benefits from the Group's insights into the global supply and demand of commodities.

DT Group	Impala Terminals	Mining Group	Galena Asset Management
50% ownership	100% ownership	100% ownership	100% ownership
83 employees*	1,625 employees	473 employees	13 years in operation

REGIONAL INFORMATION



* All employee numbers represent average annual totals.

A ROBUST PERFORMANCE
IN CHALLENGING MARKET CONDITIONS

JEREMY WEIR
Chief Executive Officer

In its 2016 financial year, Trafigura Group once again demonstrated its resilience through the economic cycle, reporting growth in trading volumes, and profit slightly lower than in 2015.

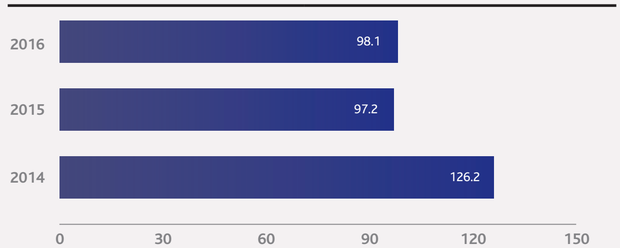
$98.1bn
Group revenue
(2015: USD97.2 billion)

$8.5bn
Total non-current assets
(2015: USD8.4 billion)

$2.3bn
Gross profit
(2015: USD2.6 billion)

$5.5bn
Shareholders' equity
(2015: USD5.6 billion)

Group revenue (USD billion)



Uncertainty and dynamic change were the watchwords for commodities markets throughout 2016, as mixed fortunes in the global economy found parts of the resources industry struggling with over-supply and depressed prices. Against this backdrop, Trafigura Group delivered a robust commercial and financial performance in the 12-month period to 30 September 2016, with significant growth in trading volumes and strong profitability, albeit somewhat reduced from the record trading result achieved in the 2015 financial year.

Net profit for the year was USD975 million, 12 percent lower than the figure of USD1,103 million in 2015. Gross profit was USD2,291 million, also 12 percent down year-on-year, while revenue was flat at USD98,098 million, compared to USD97,237 million in 2015. EBITDA, which we see as the most accurate measure of operating performance since it strips out investment gains and impairments, was USD1,628 million, down 13 percent on the 2015 figure of USD1,861 million.

Conditions remained broadly favourable for trading in the oil market, featuring sustained price volatility and over-supply. The metals market continued to present significant challenges, although some positive signs became visible in some segments in the second half of the year. We were able to build volumes in both our trading divisions, Oil and Petroleum Products and Metals and Minerals, thanks to our global reach, strong commercial relationships and an increasingly diversified global customer base. Competition was intense in all the markets in which we operate, reflected in a reduced gross margin of 2.3 percent from 2.7 percent in 2015.

At the same time, the depressed price environment had an adverse effect on our industrial assets, with the result that we decided to write down the balance-sheet value of certain assets. The sum of impairments we made in 2016 amounted to USD365 million, and was partially offset by USD244 million from reversing a prior-year impairment on another asset.

GROWTH AND EFFICIENCY

Our strategy in 2016 was unchanged: to grow physical trading volumes and revenues by delivering excellent customer service while managing operational and financial risk and optimising efficiency.

Volumes grew strongly in the Oil and Petroleum Products Trading Division, which handled a daily average of 4.3 million barrels, 42 percent more than the daily average of 3.0 million barrels in 2015. This achievement was attributable to a number of factors, including the scale and scope of our presence, the globally integrated nature of our operation, the strong relationships we have built with producers and refiners and with our mid- and downstream investment, Puma Energy, and our expertise stretching right across the product spectrum from crude and fuel oil to liquefied natural gas.

These capabilities and relationships are vital factors for success in over-supplied markets, and positioned us well to benefit from increasing demand for crude, refined products and gas. They also enabled us to take maximum advantage of the dramatic changes in product flows and arbitrage opportunities arising, for example, from the emergence of the US as an exporter of crude and that of China as a major exporter of refined products. Growth was especially strong in Asia, which bodes well for the future since that region is home to the world's most promising growth markets for oil, such as India.

In Metals and Minerals Trading, prices were generally depressed, with the exceptions of coal, zinc and nickel as continuing structural adjustment in the Chinese economy dampened industry demand and producers came under increasing pressure. Yet here, too, Trafigura was able to grow volume across its Metals and Minerals book by 13 percent overall to 59.0 million tonnes from 52.1 million tonnes in 2015, further enhancing our already significant share of these markets.

Growth came both in segments where we are well-established such as non-ferrous concentrates and refined metals but also in our newer books, coal and iron ore. We continued to differentiate ourselves from the competition by offering our business relationships innovative solutions drawing on our strengths in operations, logistics and finance. We further extended strategic relationships to support our growth, for example with Nyrstar in Europe, in which Trafigura has a 24.6 percent shareholding, and with Chinese smelters including Jinchuan Group's new copper smelter in Fangchenggang where we own a 30 percent equity stake.

Key to our resilience were the efficiencies and improvements in risk management we have created by investing significant sums in information technology and in creating consolidated mid- and back-office support centres in Mumbai, Montevideo and Shanghai. These operations enable the business to scale up without a corresponding escalation in cost and thus provide sustainable support for the bottom line.

REDUCING CAPITAL INVESTMENT

Another vital pillar of Trafigura's strategy is investing in industrial and infrastructure assets that support trading, principally through our Impala Terminals subsidiary. In 2016, this strategy reached an inflection point as a number of assets in which we had invested heavily in recent years moved from the construction phase to commercial operations.

In Brazil, the Porto Sudeste iron ore export terminal that Impala jointly controls with Mubadala Development Company built volume, though at a slower pace than anticipated owing to the depressed state of the global iron ore market: it handled about 7 million tonnes in 2016, a number that we expect to grow in 2017. To reflect the fact that the port is operating at a pace considerably below installed capacity, we wrote down its balance-sheet value by USD250 million at the year-end.

In Colombia, Impala's wet and dry barge fleet on the Magdalena River ramped-up commercial operations, exporting heavy crude, importing naphtha and handling container traffic to our inland port at Barrancabermeja. Elsewhere in the country Impala exited its involvement in the FDP railway, writing down its investment in that project by USD43 million.

As our cycle of asset investment reaches its natural conclusion, capital expenditure required to complete key projects dropped significantly to USD754 million in 2016, compared with USD1,223 million the previous year. We also made a start on reducing our leverage, partly thanks to the sale of some non-core shipping assets, and leverage reduction is a strategy we expect to continue through next year.

LEADERSHIP AND TRANSPARENCY

We introduced some changes to Trafigura's management structure during 2016. In particular we established two new management committees, one to oversee trading and the other to supervise investments. The Trading Committee manages the group's trading activities within the financial and operating parameters established by the Board. The Investment Committee is responsible for defining and implementing an investment strategy, as well as the portfolio management and risk framework for the Group and its subsidiaries. Both these bodies have enabled us to promote talented individuals from the trading divisions to more senior positions and to start building the company's next generation of leaders.

We also continued to develop our strategies of corporate responsibility and transparency during the year. In addition to our second standalone Responsibility Report, we published a general-interest guide to trading and the role of trading firms in organising global supply chains, entitled '*Commodities Demystified*', and a paper on the regulatory challenges facing trade finance. We see these activities as vital to building trust in our firm and our industry.

LOOKING AHEAD

As we move into 2017, uncertainty and change seem likely to intensify, creating new challenges as well as opportunities for commodities trading. Indeed, after the political surprises of 2016, I cannot recall another moment in recent history at which the future seemed so unclear on such a range of subjects. The one sure prediction is that expectations about economic and monetary policy, currencies and geopolitical risk will continue to fluctuate, bringing the prospect of enhanced volatility and changes in supply and demand of key commodities.

At Trafigura Group we will continue to position ourselves to take advantage of the opportunities for further growth this environment will undoubtedly create, while maintaining our focus on resilience and responsible risk management. One transaction announced after our 2016 year-end is likely to be of particular importance in 2017 and after: our investment as a significant minority shareholder alongside Russia's Rosneft and investment group UCP in Mumbai-based Essar Oil Limited. This purchase will yield broad commercial benefits for Trafigura, giving us exposure to a world-class refining and infrastructure asset with a strategic position in the global oil market and one of its fastest-growing segments. Once it is concluded, Essar Oil will join a large and still-growing collection of third-party joint ventures and investments which together with our strong trading platform are driving our business forward.

Jeremy Weir,
Chief Executive Officer

PRICE MOVEMENTS
AND SHIFTING GLOBAL FLOWS

SAAD RAHIM
Chief Economist and
Head of Analysis

The period from October 2015 to September 2016 featured solid economic growth and market uncertainties.

Our latest fiscal year was marked by significant price movements and quite a few surprises. China grew more strongly than most analysts had predicted; the Federal Reserve chose not to hike rates again after a single increase in December 2015; Britain voted to leave the EU; and oil supplies were resilient despite low prices, leading to an OPEC agreement to limit its production for the first time in eight years. In the markets we saw commodity prices as a whole fall to the lowest levels in 18 years[1], only for them to rebound by anywhere from 20-80 percent just a few months later. Of note is the fact that these moves were fairly steady in either direction, meaning that daily volatility remained subdued despite the large overall changes. In this changing price environment, demand held up better than most expected, particularly in the oil sector but also in copper and zinc, while coal was the surprise winner in terms of price growth this year. Global flows have shifted, with the US becoming a major exporter of crude oil, and China a world-scale exporter of finished products, on both the oil (diesel and gasoline) and metals (steel, aluminium) side. We have also seen emerging markets becoming major centres of demand growth.

What these shifts tell us is that markets continue to be resilient in changing circumstances, with both demand and supply adjusting to meet the realities of the moment, and despite uncertainties ahead, we expect to see the volume of commodities traded globally continuing to increase.

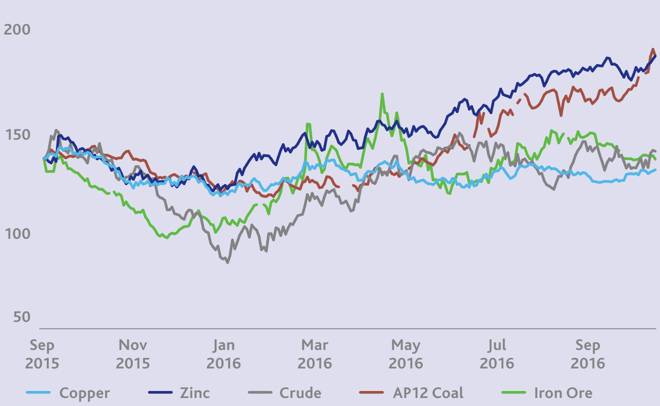
MACROECONOMIC ENVIRONMENT

Overall the global economy held up well this past year, recording relatively solid if unspectacular growth. As has tended to be the case recently, the US led the way, as the employment sector continued to show strong job gains, which fed through into rising incomes and ultimately consumption. The US consumer remains the ultimate driving force in the global economy, accounting for just under one out of every 10 dollars spent on the planet, and as such a healthy US consumption rate has continued to lift the global economy. Low interest rates have given the economy room to run, as seen in the growth in real estate, vehicle sales and fuel consumption, all important sectors for Trafigura and the commodity sector at large.

However, despite decent strength, the US economy has been unable to fully break out of its tepid recent range, with the result that the Federal Reserve has been faced with a clouded outlook as it decides the pathway of monetary policy. The weakness in headline GDP, which is likely to show full-year 2016 growth of below 2 percent, would suggest that the Federal Reserve should be seeking to keep rates low for quite some time. On the other hand, inflation is beginning to pick up, in line with the robust employment picture and rising oil prices. The Fed's dilemma between heading off inflation and allowing the economy to continue strengthening has been one of the dominant themes in the market over the last year. Although a hike in December 2016 seems likely, the path forward into 2017 looks increasingly unclear, potentially causing volatility ahead. The incoming US administration's plans on taxation and spending are also a major factor in creating uncertainty, as there is a lack of clarity on which of the initiatives proposed to date may in fact be feasible.

COMMODITIES INDEX

1 September 2015 – 27 October 2016



Source: Bloomberg Data, Trafigura Research.

1. Source: Bloomberg Commodity Index.

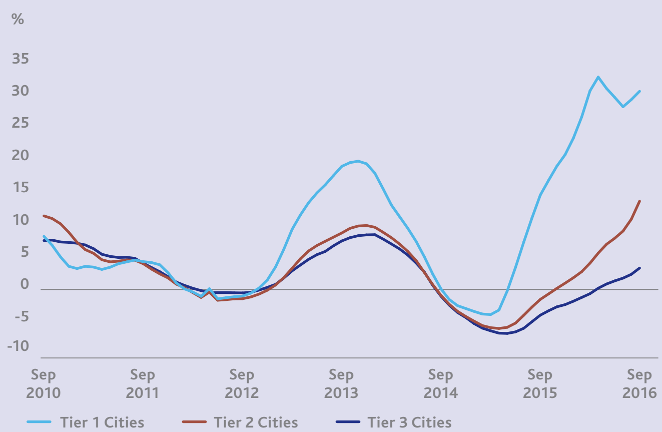
Regardless, the recent bias towards Fed tightening has combined with the likelihood of the Trump administration stoking inflation, together boosting the US dollar (USD) towards the end of the year. This has sent the Chinese RMB to a record low and weakened the British Pound (GBP) to levels not seen since the early 1980s (albeit the major part of this move was due to 'Brexit', the vote to leave the EU). The Euro has bounced around within a fairly narrow range, but has also come under pressure in recent months as policy has diverged between the US and EU, and also due to rising political risks including the upcoming elections in various EU member states. The stronger USD has in turn been a headwind for commodity prices, as production costs have fallen and consuming nations are finding it more expensive to import oil and metals.

Commodity markets are becoming used to the idea that Chinese growth is no longer the global force it once was, but the economy held up much better over the year than most projected. China's industrial slowdown did continue in the first part of the year, but saw a rebound starting in Q2 2016 due to government support. The Chinese authorities have supplied the economy with over USD2.1 trillion of additional liquidity, equivalent to the dollar value of the entire Indian economy. The infusion of funds boosted growth, particularly in the real estate sector, which saw a marked rebound across the board after suffering a severe contraction last year.

The strength in Chinese real estate and construction markets was the key story of the year in terms of metals demand. Housing prices started the move, rising first in the so-called Tier 1 cities (mainly coastal industrial hubs), but eventually seeing prices in Tier 2 and interior-located Tier 3 cities move back into positive territory as well. Rising prices led to a return of construction activity and land sales, creating a virtuous circle effect that boosted demand for copper, zinc and steel.

CHINESE NEW BUILD HOUSE PRICES

Change year-on-year



Source: China National Bureau of Statistics.

Elsewhere, Europe has not yet suffered any real impacts as a result of the UK voting to leave the EU. Indeed, the UK itself has so far defied most projections by continuing to grow at a steady pace, although inflation is starting to creep upwards due to the fall in the GBP. Germany has continued to power the rest of Europe, as manufacturing and exports have recovered, albeit at a relatively slow pace. The European Central Bank has maintained its accommodative policies, continuing to purchase large quantities of corporate and sovereign bonds, keeping interest rates at record lows.

However, the eventual withdrawal of Central Bank stimulus measures is likely to be a dominant headline over the next fiscal year, both in Europe and globally. While Central Bank rate hikes are likely to remain muted, bond markets are already reacting to the possibility of the liquidity tap being turned off and are pushing rates higher. At the same time inflation is starting to inch higher in most key regions, reversing the trend of recent years, supporting the increase in rates and in turn potentially tightening credit. How markets handle this new environment will help define the next trading year.

ENERGY MARKETS

In oil markets, a supportive macroeconomic environment has seen another year of solid demand growth, albeit a bit softer than 2015's 1.9 million barrel per day increment. However, even another year of demand growth has not been enough to address the issue of global oversupply, which continues to dominate the market. Throughout the year, the surplus has shifted between the crude side and refined products, meaning that from an overall hydrocarbons perspective, oversupply remained at record levels globally.

Despite the fall in US oil production at the beginning of the calendar year, overall supplies continued to build as various producers ramped-up production. Iran added approximately 700,000 barrels per day as it recovered from sanctions-enforced output curbs, while Saudi Arabia and Russia both hit record levels of production. These additional supplies more than offset disruptions in Nigeria and Canada, and ongoing declines in Venezuela and other Latin America producers. As a result, total hydrocarbon inventories rose to over 750 million barrels, over 500 million of which were in the OECD economies.

The issue of oversupply was not limited to crude however. Following last year's strong gasoline-led demand growth, refiners over-produced gasoline and other refined products, leading to significant stock builds in this area as well. As such, despite record levels of gasoline demand in the US this year, the market still saw gasoline inventories building at times when if the historical pattern had been followed, they should have been falling. The issue was not limited to gasoline, as distillate inventories also remained at very high levels throughout the year, although here the problem was weak demand more than oversupply. As a result of these elevated inventories, refining margins were not as strong as they were last year, but nonetheless were positive enough to incentivise refiners to maintain runs for the most part, adding to the global overhang.

As evidenced by refining margins holding up, demand overall continued to be healthy, with strong growth in particular in the US, China, India and Mexico. The composition of that demand has been led by gasoline, as diesel demand has remained soft. The divergence in the fortunes of the fuels has resulted from the relative strengthening of consumers globally, boosting gasoline, while industrial activity has stagnated, weakening diesel demand.

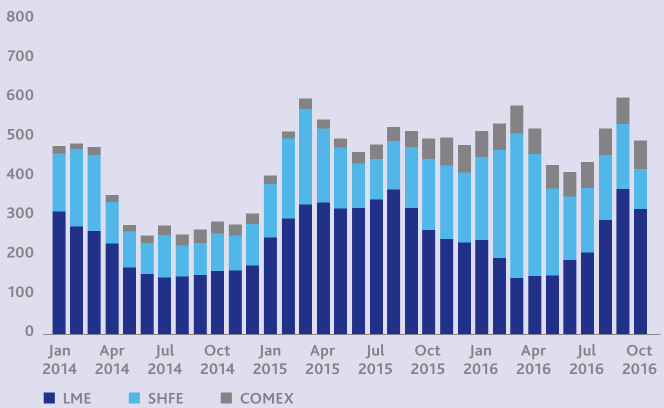
Towards the close of the year, OPEC member nations reached an agreement to limit their production, potentially lowering total volumes by 1.2 million barrels per day, in addition to up to 600,000 barrels per day from non-OPEC members. If the organisation's members adhere to their agreed limits, we will start to see a tightening market next year. Yet compliance traditionally has been a major issue in this type of deal, and a higher price could lead to significant additional volumes being produced in the US, China, Latin America and elsewhere. It remains to be seen what the ultimate impact will be.

NON-FERROUS MARKETS

Metals markets this fiscal year were much more differentiated in their movements than they were in 2014-15. Divergent market fundamentals pushed zinc and nickel prices significantly higher and aluminium moderately higher, while copper, normally seen as the key bellwether of the global economy, remained essentially flat over the course of the year.

Copper began drifting lower in late 2015 along with the rest of the commodity complex, reaching a low of USD4,330 per tonne in January. Despite some increased mine outages towards the end of the year, mine supply generally was much less of an issue this year than in years past. Outages in Chile were balanced by a ramp-up in Peruvian output. Prices did not fall enough to force major mine closures, as many analysts had projected given the slide towards the low-USD4,000s. However, while outages per se were down, the issue of ore grade deterioration has led to the overall level of concentrate availability being impacted. This will be an area to watch in coming years as well.

EXCHANGE INVENTORY OF REFINED COPPER



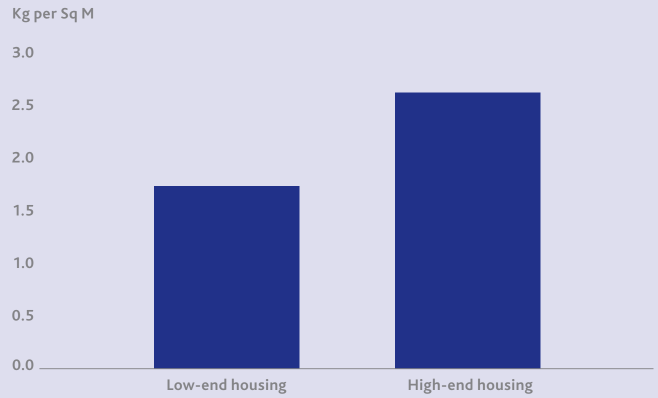
Source: IAI, Trafigura Research, November 2016.

While copper concentrates availability remained robust, challenges emerged on the refined metal side. Overall, the balance did end up looking better than projected at the beginning of the year, as a rebound in China's real estate and vehicle sectors, combined with increased build-out of the national electricity grid, meant that demand growth stayed above 3 percent year-on-year. Other regions also contributed to demand growth as well, with India and other Asian economies (ex-Japan) performing better than in recent years, and Europe growing materially for the first time in five years. However, stronger than expected demand was still not enough to clean up the market, leaving a significant surplus of refined metal for the year, which weighed on prices. As a result, copper ended the fiscal year almost exactly where it began, around USD4,800 per tonne.

As was widely anticipated, supply dynamics in the zinc market drove prices significantly higher, reaching five-year highs. The closure of the Century Mine in Australia and Lisheen Mine in Ireland had been built into projections for some time, but the voluntary closure of two key mines by a major mining concern brought the deficit into even sharper relief. As the year progressed, the concentrates deficit made itself felt, resulting in a major price move higher. Demand also held up well, driven by galvanized steel, in turn a beneficiary of stronger infrastructure and real estate demand in China. Although prices hit a low of just under USD1,500 per tonne in January, they then marched steadily upwards to just shy of USD2,500 per tonne by the end of the financial year. Although the supply picture is expected to improve somewhat over the coming year, it is likely not enough to rebalance the market, particularly if demand continues to remain strong.

Aluminium prices moved in a much narrower band than zinc, albeit still moving materially, falling to under USD1,450 in late 2015 before rebounding to nearly USD1,700. Prices remained range-bound despite strong demand growth, due to the significant capacity China has invested in over the last decade. Better integration of smelting capacity across the value chain, particularly with captive power generation, and falling energy costs have led to a lower and flatter cost curve, with Chinese companies now in a much more competitive position than previously. However, that shift did not prevent some reduction in capacity in 2016 when prices dipped to low levels. As a result of the capacity curtailments, the market has seen sharp declines in onshore aluminium stocks, potentially pointing to a move higher if demand continues to perform as it has done in recent years.

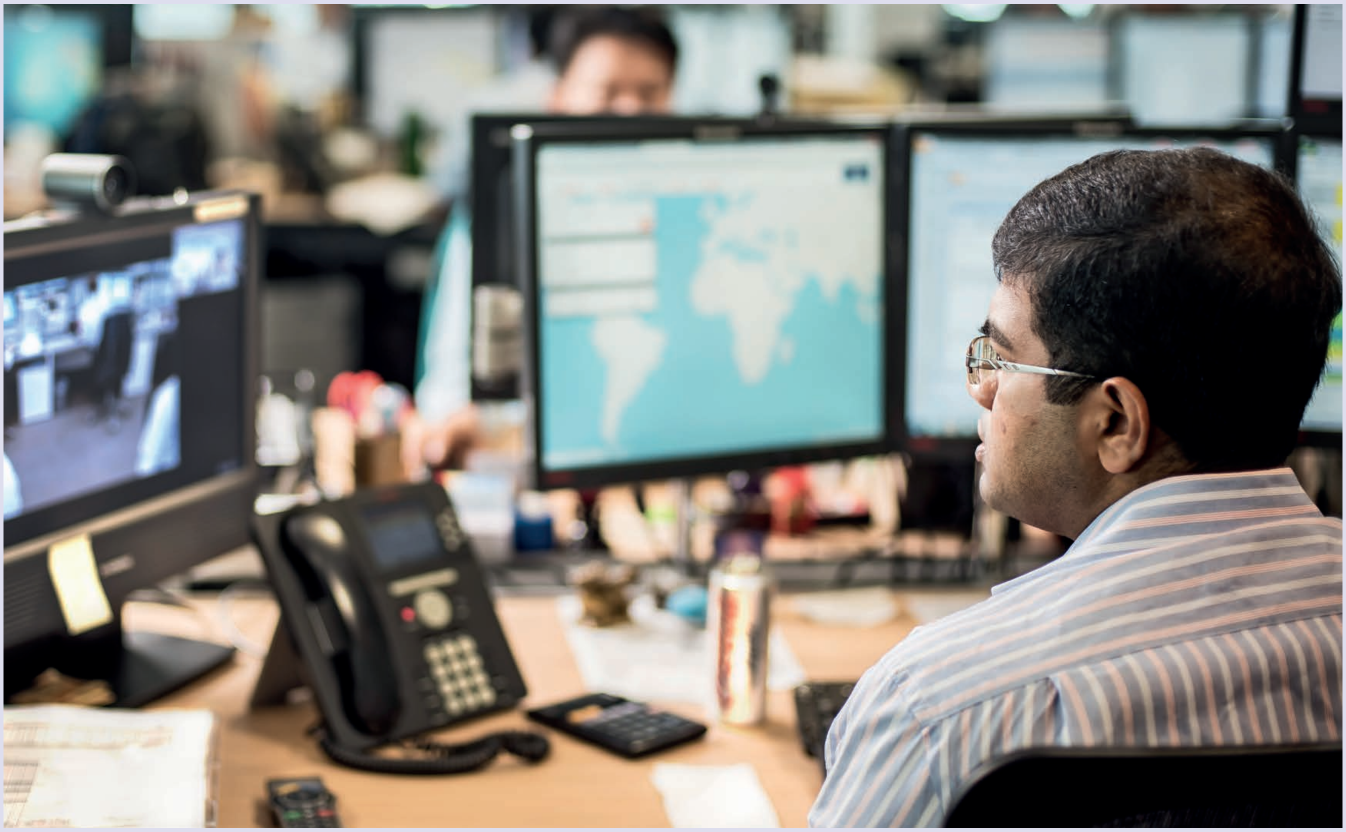
CHINA ALUMINIUM CONSUMPTION IN CONSTRUCTION



Source: Wood Mackenzie.

The global demand picture for aluminium is being driven by rising intensity of use. As Chinese consumers have moved up the income chain and into higher-end housing, their consumption of aluminium used in construction has gone up by approximately 60 percent. Rising substitution in vehicles, with aluminium being increasingly favoured due to its weight-to-strength ratio, has seen aluminium consumption per vehicle sold in North America rise sharply from 100kg/vehicle in 2010 to 150kg/vehicle in 2015. This is expected to rise further in coming years, nearly doubling to 2030.

Nickel prices continued to slide coming into the start of our fiscal year, reaching a low of USD7,600 per tonne in February, but then remaining range-bound between USD8,200 – USD9,000 for most of the year. That changed in summer, when a new government in the Philippines instituted a stringent environmental audit, leading to mine closures and a significant impact on supply availability. Stocks of nickel ore are hovering at the lowest levels in four years, keeping prices above USD10,000 per tonne today. However, the market is adapting, with Indonesian suppliers starting to produce nickel pig iron, replacing some of the units lost after raw ore exports were banned at the start of 2014. Despite this offset, demand for stainless steel, which relies on nickel as an input, continues to rise on the back of the Chinese liquidity push, and therefore the market is likely to remain in deficit for some time to come.

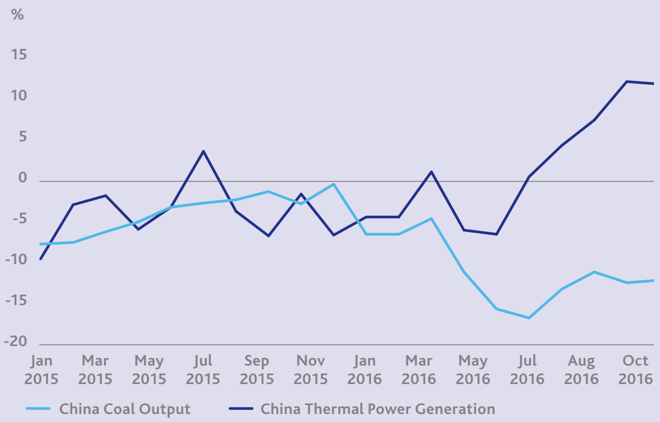


Staff at Trafigura's Singapore office.

BULK MARKET

Coal was the big winner this year, essentially doubling from USD36.50 per tonne in February to over USD70 per tonne by year-end, the steepest rise on record. This was due primarily to government-enforced curtailments of mine production in China, as the country looked to reduce over capacity in loss-making sectors of the economy. The government has targeted closure of 500 million tonnes of production capacity in the next three to five years, and also sought to cut back available capacity by reducing the number of operating days from 300 to 276 days a year.

CHINA COAL OUTPUT AND THERMAL POWER GENERATION, YEAR-ON-YEAR GROWTH



In the meantime, Chinese demand continued to march upwards, driven by economic activity, itself a result of the increased liquidity put into the economy earlier this year. Power generation grew by over four percent year-on-year, as industrial activity rebounded on the back of bank lending and overall demand growth. Rising Henry Hub prices and relatively stable LNG prices have also allowed coal prices to remain at elevated levels.

Iron ore benefited from rising steel demand, which in turn was driven by the liquidity push from the Chinese government, as well as strong growth globally in terms of vehicle sales and real estate. The run-up in coking coal prices towards the end of our fiscal year seems to have pushed iron ore prices higher as well, but it is unclear how long this effect might last. Unlike other markets such as zinc or crude, supply cutbacks by smaller producers were offset by significant increases from bigger players, as well as the start-up of large scale projects in Australia and Brazil. As with most of the other commodities, policy decisions in China are likely to play a major part in determining the forward path for iron ore.

LOOKING AHEAD

Commodity markets are driven by a complex interplay of physical fundamentals, macroeconomic drivers, geopolitics and policy events, and as such remain ever-changing. The conventional wisdom at the start of our fiscal year was that markets would continue to slide indefinitely as China continued a sharp slowdown and overall supplies failed to adjust. Instead, we have seen better demand growth, driven by a robust global consumer class, and supplies impacted by producer cuts and policy initiatives. Overall, markets feel more balanced than they have over the last few years, and while significant question marks remain around Central Bank behaviour and government policies, a stronger global consumer should help propel markets forward.

STRONG TRADING RESULT
DRIVEN BY INCREASED VOLUMES

CHRISTOPHE SALMON
Chief Financial Officer

The Trafigura Group continued its path of profitable expansion during the 2016 fiscal year, growing traded volumes but recording reduced net profit after write-downs on some industrial assets.

Performance Indicators

$98.1bn Group revenue (2015: $97.2 billion)	**$8.5bn** Total non-current assets (2015: $8.4 billion)
$2.3bn Gross profit (2015: $2.6 billion)	**$41.2bn** Total assets (2015: $39.1 billion)
2.3% Gross profit margin (2015: 2.7 percent)	**$5.5bn** Shareholders' equity (2015: $5.6 billion)
$0.975bn Net profit (2015: $1.1 billion)	**$1.6bn** EBITDA* (2015: $1.9 billion)

Despite a global commodities market characterised by significant stresses and headwinds, the Trafigura Group delivered a sound financial performance in 2016. The year had two key features: continued profitable volume growth in both trading divisions, Oil and Petroleum Products and Metals and Minerals; and write-downs on some of the Group's industrial and logistical assets, reflecting the impact of a more challenging business environment on the value of these assets. The net result was a profit for the year of USD975 million, a decrease of 12 percent from the figure of USD1,103 million recorded in 2015.

The 2016 performance is broadly in line with the levels seen over the past several years, albeit lower than the peak achieved in the exceptional market conditions of 2014-15. It demonstrates the strengths of a diversified business model that enables Trafigura to maintain strongly profitable operations in the widest variety of market conditions.

In 2016, both main trading divisions made a significant contribution to profit. A highlight of the year was a sharp increase in traded volume in the Oil and Petroleum Products Trading Division, which handled a daily average volume of 4.3 million barrels – a 42 percent increase from the daily average of 3.0 million barrels in 2015. Volume also increased in Metals and Minerals trading, to 59.0 million tonnes from 52.1 million tonnes in 2015. Our inventories in storage and in transit showed a correspondingly sharp increase, with our ability to finance this growth a key indication of Trafigura's financial strength.

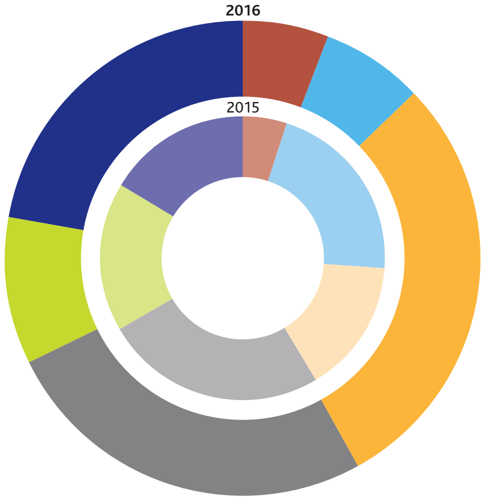
The year saw Trafigura complete a phase of intensive investment in infrastructure and logistical assets that support access to trade flows. A number of important capital investment projects ramped-up commercial operations, but faced challenging commodity market conditions. In consequence we took significant impairments on the value of certain assets, with total write-downs of USD365 million, partially offset by a USD244 million gain from reversing a prior-year impairment on another asset. At the same time, we made a start on reducing our leverage through the sale of non-core assets.

We demonstrated continued disciplined credit risk management over the year. With distress affecting increasing numbers of commodity producers, processors and refiners as well as large parts of the shipping industry, our ability to limit our exposure to credit events was crucial.

* EBITDA (earnings before interest, tax, depreciation and amortisation) is operating profit excluding the share in results of equity-accounted investees, depreciation and amortisation, gains/losses on divestments of subsidiaries, equity-accounted investees and other investments, impairment losses and other operating income and expense.

OIL AND PETROLEUM PRODUCTS

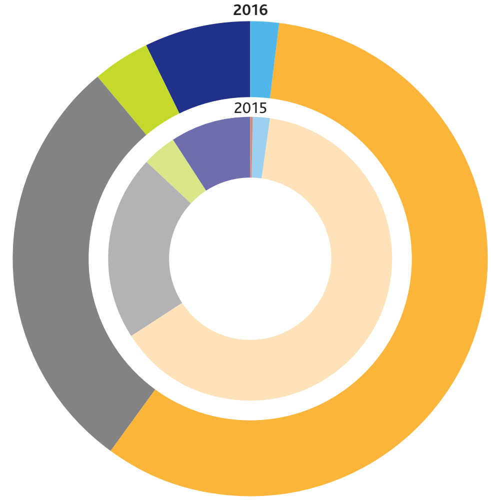
Revenue by geography (%)



Region	2016	2015
Middle East	**6%**	5%
Africa	**7%**	21%
Asia & Australia	**29%**	15%
Europe	**26%**	25%
Latin America	**10%**	17%
North America	**22%**	16%

METALS AND MINERALS

Revenue by geography (%)



Region	2016	2015
Middle East	**–**	0.3%
Africa	**2%**	2%
Asia & Australia	**58%**	64%
Europe	**29%**	21%
Latin America	**4%**	4%
North America	**7%**	9%

PROFITABILITY

Revenue in 2016 totalled USD98,098 million, broadly comparable with the USD97,237 million recorded in 2015, reflecting sharply increased volume offset by lower average prices. Total volume of commodities traded rose by 33 percent to 264.4 million tonnes from 198.4 million tonnes, with oil and petroleum products volumes rising 41 percent to 205.4 million tonnes and metals and minerals volumes increasing 13 percent to 59 million tonnes.

Gross profit was USD2,291 million, a decrease of 12 percent from the figure of USD2,600 million recorded in 2015. This represented a gross profit margin of 2.3 percent compared to the margin of 2.7 percent registered in 2015, reflecting a return to more normal business conditions. General and administrative expenses including staff costs were USD947 million, a 5 percent decrease from the 2015 figure of USD995 million despite the volume increases. This reflects in part the operating and scale efficiencies we have created by establishing consolidated mid- and back-office support centres in Mumbai, Montevideo and Shanghai.

In divisional terms, the gross profit figure reflected a 13 percent decrease in gross profit in oil and petroleum products to USD1,460 million and a 10 percent fall in gross profit in metals and minerals, with gross profit at USD831 million compared to USD920 million in 2015.

The 'other income/expense' line showed a significant negative impact from impairments of financial and non-financial assets and of equity-accounted investees. Impairments to financial assets totalled USD40 million. Impairments to non-financial assets totalled USD75 million. Of this USD43 million represented a write-off of Impala's investment in the FDP rail project in Colombia, management of which has been transferred to a local operator. Impairments to equity-accounted investees were USD250 million, representing a write-down in the value of the Porto Sudeste iron ore export terminal in Brazil. These impairments were partially offset by the reversal of a USD244 million impairment that had been taken in 2015 on the value of the AEMR iron ore mining project in Angola. In our view the impairments taken in 2016 reflect a fair approach in view of the distressed conditions in commodity markets and their likely impact on our assets.

From an operating profit perspective, we believe that EBITDA is the appropriate indicator to assess our performance as the amount of depreciation and amortisation has steadily increased following the growth in our fixed asset portfolio. EBITDA in 2016 was USD1,628 million, compared to USD1,861 million the previous year, a decrease of 13 percent but still a very strong operating result in the market circumstances.

Net financing costs this year totalled USD121 million, less than half the 2015 level. This reduction is partly due to the fact that in 2015, USD49 million relating to the distributions on the perpetual capital securities was recorded as part of financing costs because these securities were not transferred to Trafigura Group Pte Ltd. from Trafigura Beheer B.V. until the end of 2015. In 2016, the capital securities and their associated distributions have been recorded as part of equity. The reduction in net financing costs also reflects the net effect of an increase in finance expense due to higher borrowings and a significant increase in finance income generated through our structured trade finance activity. Trafigura's financial income and expense line items include interest on cash balances and loans respectively, as well as interest from commercial operations.

CAPITAL ALLOCATION

An important focus for the Trafigura Group in recent years has been investing in industrial and logistical assets that offer strong synergies with our physical trading business. In 2016, we reached the end of a period of intensive investment dating back to 2012 as our largest infrastructure investment projects were completed and we started commercial operations. Capital expenditure was USD754 million, significantly lower than the previous year's level of USD1,223 million. In 2017 and in subsequent years, we expect capital expenditure to continue to sharply reduce as no further major investments of this kind are currently planned.

ASSETS

As at 30 September 2016, total assets amounted to USD41,230 million, an increase of 5 percent from the figure of USD39,087 million at the same date in 2015. Fixed and non-current assets were 2 percent higher at USD8,528 million, compared to USD8,357 million a year earlier. The variance reflects the net effect of a number of developments including Impala Terminals' investments in Colombia, Paraguay and elsewhere, the disposal of non-core assets including the sale-and-leaseback of six new medium-range oil tankers that had been previously purchased and various impairments to reflect the fair value of our fixed-asset investments. Equity-accounted investees rose by 9 percent to USD3,464 million from USD3,168 million, reflecting the net effect of additional corporate investments, income received from investments, disposals and impairments. Additions included Trafigura's contribution to a capital increase by Puma Energy, the equity investment in the copper smelting venture with China's Jinchuan Group, and the investment in Nyrstar. The impairment was the USD250 million write-down on Porto Sudeste described above.

Pre-financings and prepayments were broadly steady with a decrease in longer-term pre-financing activity offset by an increase in prepayments of 12 months or less duration. Loans receivable were 82 percent higher than last year at USD801 million, due principally to monies outstanding following the disposal of our interest in the AEMR iron ore mining project in Angola.

Current assets were 7 percent up at USD32,702 million from USD30,641 million in 2015. Inventories rose by more than 52 percent to USD11,538 million from USD7,614 million a year earlier, reflecting the significant growth in trading volumes during the year. Of the total inventories as of 30 September 2016, USD7,069 million were held in storage and USD4,456 million were in transit. In line with Trafigura's risk management policies, all stock was either presold or hedged at all times throughout the year. Group equity was USD5,847 million as of 30 September 2016, compared to USD5,658 million as at 30 September 2015. Current liabilities including short-term bank borrowings were up from the 2015 figure of USD25,629 million to USD27,652 million.

CASH FLOW

Operating cash flow before working capital changes was USD1,615 million in 2016, down from the figure of USD1,886 million in 2015. Trafigura believes its financial performance is best assessed on the basis of cash flow before working capital changes, since the level of working capital is predominantly driven by prevailing commodity prices and price variations are financed under the Group's self-liquidating finance lines. Cash flow from operating activities after working capital changes was a net outflow of USD2,827 million compared with a net inflow of USD1,717 million in 2015. Investing activities resulted in a net cash use of USD67 million compared to a net use of USD2,198 million in 2015. Net cash generated from financing activities was USD2,502 million compared to USD345 million in 2015. The overall balance of cash and cash equivalents as of 30 September 2016 was USD3,142 million, a decrease of USD392 million from the figure of USD3,534 million at the same date the previous year.

MATSA mine near Seville, Spain.

Crude oil vessel at Corpus Christi terminal, Texas, US.

PUBLIC RATINGS

Trafigura does not hold a public rating and does not seek to obtain one. There are a number of reasons for this, including the fact that Trafigura's strategy has always been to obtain funding from stakeholders who understand its business model, rather than make investment decisions on the basis of a rating. In addition, holding a rating could cause Trafigura to take more short-term focused decisions in order to maintain a particular rating level. This would conflict with the Group's focus on long-term value creation and maintenance of a strong balance sheet. Trafigura has been highly successful in securing funding without a public rating and had access to over USD45 billion, as at 30 September 2016, in credit facilities from diverse funding sources.

Financial discipline is inherent to Trafigura's business and finance model due to its reliance on debt markets for capital and liquidity. Trafigura's significant expansion of its sources of financing over the years has been achieved on the basis of the Group maintaining an acceptable and sustainable credit standing, consistent with an investment grade profile. The Group's financial discipline is reinforced by the financial covenants provided to our unsecured lenders and is underlined by the strong support we receive from our banking group and investors.

BANK FINANCING

As a privately owned company, Trafigura funds itself primarily through the banking and debt capital markets, relying on a combination of diversified funding sources and strong banking relationships. For a number of years and throughout various commodity cycles and financial market environments, Trafigura has cemented strong relationships with its lending banks.

In spite of the challenges facing commodity markets, Trafigura's banking group remained stable and consisted, as at 30 September 2016, of 121 banks across the world. Cyclicality and volatility is a characteristic of many industries, not just commodities trading. Just as we rely on an open dialogue with our banking partners at times of increased stress or volatility within the banking market, likewise banks and investors rely on clear and comprehensive communication from Trafigura when increased commodity market volatility brings new questions to the fore. As such, Trafigura has significantly and demonstrably increased its transparency over the past few years, with very positive feedback indeed from its main stakeholders.

Access to deep and constant liquidity is a key reason for Trafigura's leading competitive position and we see communication with banks, financial stakeholders and trading counterparties as instrumental to maintaining this position. Trafigura sources funding from a number of markets: syndicated bank loans, securitisation markets, bond markets and trade finance. Of total current lines of USD45 billion, there is approximately USD14.4 billion which remains unutilised, ensuring resilience during volatile markets.

As at 30 September 2016, the Group had USD8.0 billion (2015: USD7.8 billion) of committed revolving credit facilities of which USD3.2 billion (2015: USD3.2 billion) remained unutilised. The Group had USD2.0 billion (2015: USD1.8 billion) of immediately (same day) available cash in liquidity funds. The Group had immediate access to available liquidity balances from liquidity funds and corporate facilities in excess of USD5.2 billion (2015: USD4.9 billion). Over 2016, Trafigura refinanced both of its revolving credit facilities (RCFs) and Samurai loan, which altogether represent the cornerstone of Trafigura's unsecured funding as well as a large proportion of the Group's banking pool. In October 2015, Trafigura refinanced its Asian revolving credit facility which continues to be syndicated mostly with South Asian, Australian and Middle Eastern banks and closed at USD2.2 billion. As part of the transaction, the 2014 364-day USD and one-year CNH tranches were both refinanced, along with the maturing three-year USD tranche from 2012. Twenty-eight banks participated in the transaction of which six were newcomers to the facility.

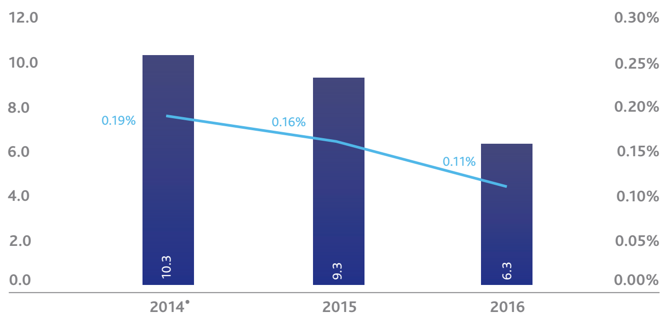
The Asian RCF closing was followed in early 2016 by the refinancing of the European RCF which closed on 24 March 2016. This facility was launched at USD4.3 billion, and closed substantially over-subscribed at USD5.1 billion with a total of 45 banks.

March 2016 was an eventful month for Trafigura when we also refinanced our Samurai loan, a Japanese Yen denominated loan placed with domestic Japanese banks. Trafigura has been accessing the Samurai

loan market since 2012 and has been able to increase the size of the facility on each of the three occasions that we have accessed the market. The March 2016 facility reached JPY50.5 billion (USD450 million), up from JPY26 billion (USD280 million at historical foreign exchange rates) in 2014. The deal also attracted nine new lenders, reaching a total lending bank pool of 15 Japanese financial institutions.

VALUE AT RISK

(USD million)



■ Average 1-day VaR 95 percent
— % of Group equity
• 2014 based on equity as reported TBBV consolidated accounts. *Basis: IFRS.*

The Value at Risk (VaR) metric is one of the various risk management tools that Trafigura uses to monitor and limit its market risk exposure. Trafigura uses an integrated VaR model which captures risks including commodity prices, interest rates, equity prices and currency rates (see further details in Note 27). During 2016, average 95 percent one day VaR for derivative positions was USD6.3 million (2015: USD9.3 million) which represented less than 1 percent of Group equity.

SHAREHOLDER STRUCTURE

Trafigura is exclusively owned by its management and about 600 of its senior employees, who are therefore focused on the long-term success of the business, promoting management depth and stability, and encouraging prudent risk management. The decision as to which employees may become shareholders is discretionary based upon management's evaluation of the individual's performance, seniority and future potential.

Trafigura has continuously built up its shareholders' equity since inception in 1993 and the Group retains profits to further increase its capital base. No dividend or profit distribution is paid other than through share buy-backs. Any share buy-backs are discretionary and each buy-back can be deferred indefinitely subject to sufficient liquidity being available/compliant with financial covenants.

LEVERAGE AND ADJUSTED DEBT

As a physical trading group, Trafigura relies on a specific funding model. As a result, one cannot apply the same financial analysis framework as for other, more typical industrial companies.

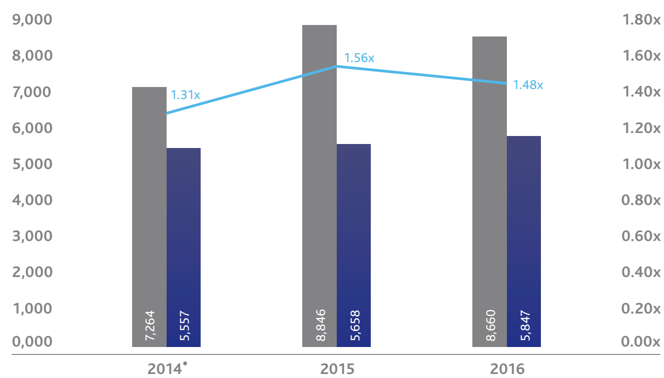
Banks and rating agencies have historically considered financial leverage after excluding some specific balance sheet items (e.g. inventories, securitisation), resulting in the use of adjusted debt as an overall leverage metric. The adjusted debt metric represents Trafigura's total long- and short-term debt less cash, deposits, readily marketable inventories, debt related to the Group's securitisation programme and the non-recourse portion of loans. This metric is a better measure of the Group's financial leverage than a simple gross debt metric. In particular, the following adjustments are made:

- The securitisation programme is taken out on the basis it is an entirely distinct legal entity from Trafigura with no recourse to the Group and is only consolidated into the financial statements in accordance with the Group's accounting rules.
- Cash and short-term deposits are deducted from debt.
- Pre-sold or hedged stock is deducted from debt. This reflects the great liquidity of the stock and the ease at which this could be converted to cash. As previously described, Trafigura's policy is to have 100 percent of stock hedged or pre-sold at all times.
- Non-recourse invoice discountings or portion of loans (for example non-recourse portions of bank financings used to extend prepayments to counterparties) are deducted from debt.

As at 30 September 2016 the ratio of adjusted net debt to Group equity stood at 1.48x, down from 1.56x at 30 September 2015. The build-up of our fixed assets and infrastructure portfolio, initiated in 2012 and now complete, had weighted negatively on this ratio. We are now in a process of de-levering our balance sheet by pursuing multiple initiatives, such as disposing of non-core assets and committing to significantly reducing our capex programme over the years to come. We are thus committed to continuing to reduce the ratio in 2017.

TRAFIGURA ADJUSTED DEBT

(USD million)



■ Adjusted total debt ■ Group equity (inc. non-controlling interest)
— Adjusted debt/Group equity
• 2014 based on equity as reported TBBV consolidated accounts. *Basis: IFRS.*

TAXATION

Trafigura operates in a multitude of jurisdictions and adheres to applicable local and international tax law in the countries in which it operates, including legislation on transfer pricing. The Group's tax policy is to pay appropriate tax according to work carried out in each jurisdiction, as determined by a functional analysis of operations using standard measures wherever possible, underpinned by reports prepared to fulfil local transfer pricing requirements. The Group's effective tax rate – the average rate at which consolidated pre-tax profits are taxed – varies from year to year according to circumstances, but in 2016 it was 10.2 percent (2015: 11.3 percent).

OUTLOOK

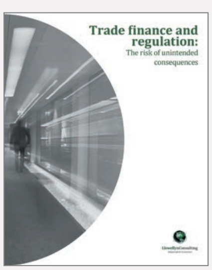
We expect challenging conditions to persist in commodities markets through 2017, with pressure increasing on producers and other players with large asset footprints. Accordingly Trafigura will continue to focus on running a resilient business focused on physical trading, logistics and risk management. As we stated last year, that involves three key priorities:

Impala Terminals and Mubadala's Porto Sudeste export facility, Brazil.

- First, we will ensure that our liquidity position remains robust even in conditions of extreme volatility and stress. To this end, we have developed close and trusting relationships with our many banking partners, and it is a high priority to maintain these by demonstrating maximum transparency on all our transactions.
- Second, we will focus intensely on maximising efficiency and minimising cost. Trading these markets will require greater agility and financial strength than ever. By the same token, they will offer significant opportunities to those firms that navigate them successfully.
- Third, we will continue to maintain a close eye on counterparty credit risk to minimise risk of losses or defaults.

Part and parcel of this conservative approach, is also to continue to reduce both our leverage and our capital expenditure as compared with the levels seen in previous years. It is worth reiterating that this key consideration also determined our approach to the landmark transaction we are in the process of completing to acquire a significant minority stake in Essar Oil Limited of India. This will be financed on a non-recourse basis, with a limited equity contribution from Trafigura that is well within our reduced capital expenditure level for 2017.

Christophe Salmon,
Chief Financial Officer



Trade finance is part of the life blood of the global economy as well as a vital tool in commodities trading. But there is growing concern in the banking and trading community that changes in financial regulation could put that life blood at risk.

This concern prompted Trafigura to commission the economics firm Llewellyn Consulting to produce a study entitled '*Trade finance and regulation: the risk of unintended consequences*'. The study, written on the basis of interviews with policy-makers, banks and users of trade finance, suggests trade finance is often taken for granted as a well-functioning and liquid market driven by demand.

But it highlights how some of the detailed changes to banking rules now under discussion among regulators could call those assumptions into question. At worst, the paper argues, these changes could make trade finance more expensive for traders, producers and consumers, and even prompt some important trade finance banks to quit the market.

"Disruptions to trade finance, while infrequent, are highly damaging when they occur since one form or another of trade finance underpins around 90 percent of world trade," the authors argue. "All the data shows that trade finance is an inherently low-risk activity featuring very low historic credit losses, and as such it warrants being handled with care.

"But there is now growing concern over the possibility that trade finance could be adversely affected by over-heavy, insufficiently nuanced regulation, particularly in an area like commodity trade finance where policy-makers may perceive the risks involved to be greater than they are. In particular, it is important that separate regulations in the areas of capital, leverage and liquidity do not add up to more than the sum of their parts."

Trafigura has discussed the paper in recent months with leading regulators including the European Banking Authority, the European Commission and the European Central Bank. Our aim has been to impress on them the need to pay special attention to the impact on trade finance as they work with their global peers to finalise the next round of detailed rules.

OUR BUSINESS MODEL CREATES VALUE

Our vision is of an increasingly interconnected and prosperous world in which commodities pass seamlessly from their points of origin to points of need.

WHAT WE DO

We connect producers and end-users of commodities by performing transformations in space, time and form.
We use our market knowledge, logistics and infrastructure:

- to move physical commodities from places where they are abundant to where they are in demand (space).
- to store physical commodities while supply is unusually high and release inventories at times of high demand (time).
- to blend physical commodities to alter their quality or grade according to customer specifications (form).

Transformations in space, time and form

SOURCE
We negotiate offtake agreements with oil producers, refiners, mining companies and smelters. We invest in logistics that improve market access for our suppliers.

STORE
We store petroleum products at owned and third-party tankage. We store metals and minerals at Impala Terminals and third-party-owned facilities.

BLEND
We blend physical commodities to regional, market and customer specifications in strategically located terminals and warehouses around the world.

DELIVER
We operate efficient, safe and high-quality logistics. We move commodities by barge, truck, rail, pipeline and vessel in support of our core trading activities and for third parties.

ADVANCING TRADE: HOW WE CREATE VALUE

BY MAKING MARKETS WORK
We use our global network and market intelligence to connect supply and demand for commodities and ensure delivery in the right place, at the right time, to the right specification.

BY OPTIMISING THE SUPPLY CHAIN
We have developed world-leading logistical capabilities enabling us to source, store, blend and deliver oil and petroleum products, metals and minerals reliably and efficiently anywhere in the world.

BY MANAGING RISK
Our business model is resilient in the most volatile market conditions. We systematically hedge price risks and have created systems and processes that enable us to manage a complex range of operational and financial risks.

BY INVESTING IN INFRASTRUCTURE
We have invested in high-quality infrastructure that supports our trade flows, such as oil storage facilities, warehouses, ports and transport.

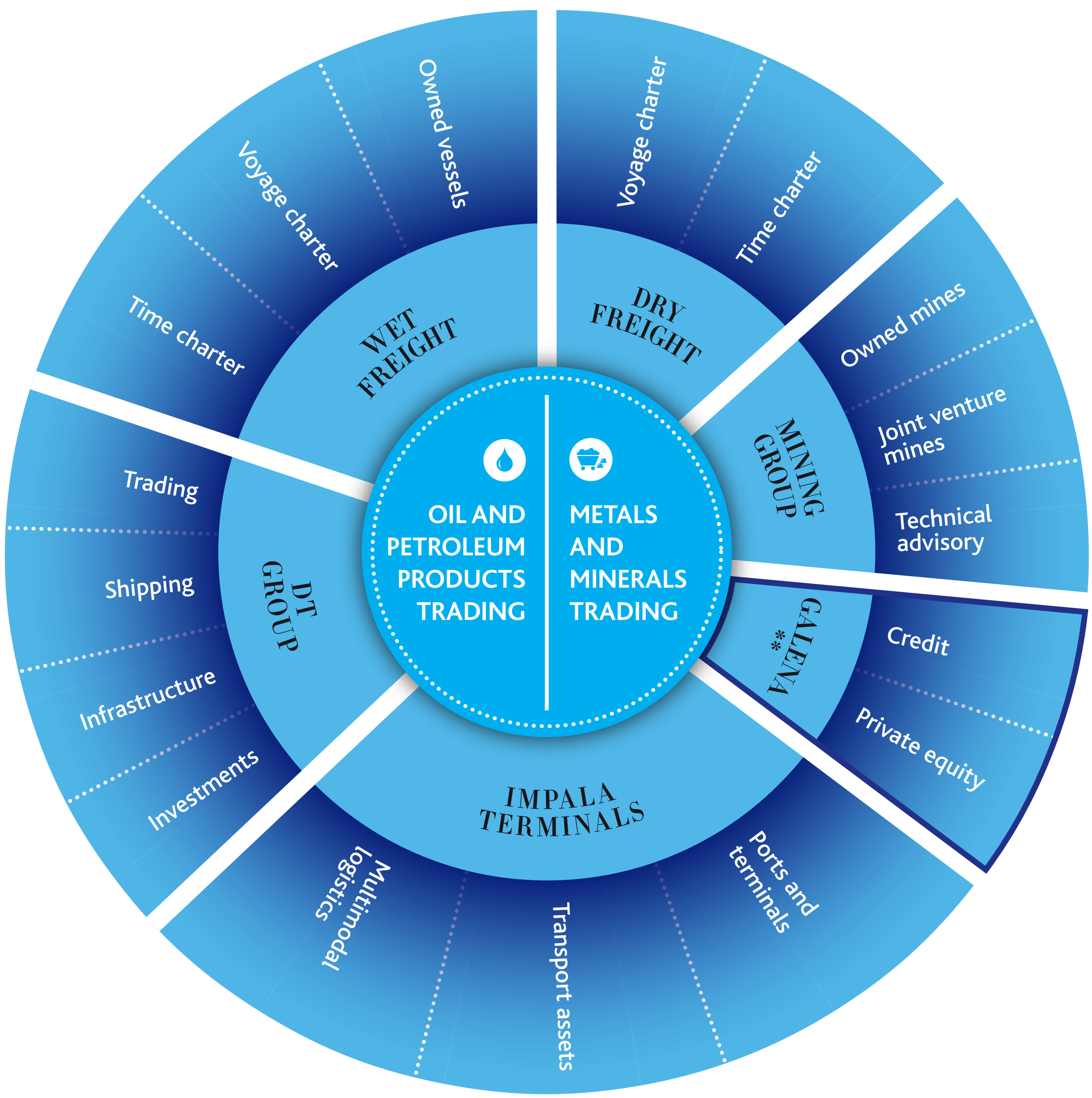
BY SUPPORTING OUR CLIENTS
Our strong financial resources give us the capacity to add value for our customers through integrated solutions incorporating trading, finance, infrastructure investment and risk management in the physical commodity sector.

BY ACTING RESPONSIBLY
We are committed to operating and growing our business in a responsible and sustainable way. Responsible trade drives economic and social progress.

OUR STRUCTURE
DELIVERS VALUE

Trafigura's core business is physical trading and logistics. Strategic investments in industrial and financial assets complement and enhance this activity. We structure these investments as standalone businesses.*

TRADING ACTIVITIES



* The size of each segment is not indicative of percentage of ownership or contribution to Trafigura's bottom line.
** Galena Asset Management's teams operate wholly independently of Trafigura.

OIL AND PETROLEUM PRODUCTS TRADING

JOSÉ LAROCCA
Head of Oil and Petroleum Products Trading

Trafigura is one of the world's largest traders of crude oil, refined products and liquefied natural gas. In 2016, we traded record volumes of more than four million barrels daily and delivered a strong profit performance.

HIGHLIGHTS

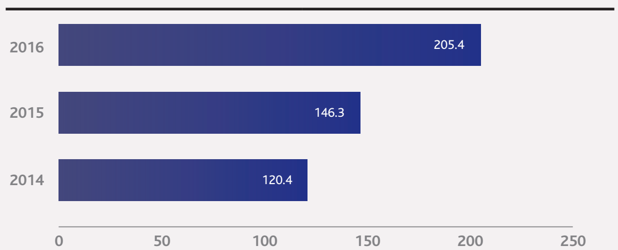
- Sales volumes of oil and petroleum products in Asia grow by 80 percent.
- Fuel oil volumes more than triple on last year.
- LNG volumes traded increase by 53 percent.

65%
Contribution to global revenue
(2015: 67 percent)

205.4mmt
Total volume traded
(2015: 146.3mmt)

Oil and Petroleum Products volumes traded (mmt)	2016	2015
Biodiesel	**0.6**	0.4
Bitumen	**1.0**	0.8
Condensates	**2.0**	2.7
Crude oil	**85.9**	70.9
Fuel oil	**33.0**	9.4
Gasoline	**22.0**	17.2
Liquefied Natural Gas (LNG)	**6.4**	4.2
Liquefied Petroleum Gas (LPG)	**4.1**	2.6
Middle distillates	**36.4**	29.0
Naphtha	**14.0**	9.3
Total	**205.4**	**146.3**

Oil and Petroleum Products total volume traded (mmt)



MARKET ENVIRONMENT AND PERFORMANCE

The global markets for crude oil, refined products and natural gas presented an exceptionally dynamic picture in 2016. This was a near-ideal environment for a physical trading firm like Trafigura, with global reach and with expertise stretching right across the product spectrum.

It was a year characterised by over-supply in almost every product category, as the surplus of crude yielded strong refining margins and incentivised refineries to transform crude into surpluses of refined products. But it was also a year of rising demand and, even more importantly for trading, of dramatic changes in product flows and arbitrage opportunities, underpinned by historically low freight rates.

Indeed, the trends over the past year have been precisely the reverse of those predicted by conventional wisdom in previous years. It was a world of abundant, not tightening, supply; a market favouring lighter, not heavier, crudes; of global and not just Asian demand growth, including a resurgence in demand in OECD countries; and one where gasoline was the favoured fuel, rather than diesel. Other significant and unexpected developments include the emergence of the US as a major crude exporter and of China as a major exporter of refined products, alongside the liberalisation of the Chinese refining business.

As these trends have played out, trading in more and more refined product categories has become truly and consistently global, rather than regional or seasonal. This broad transformation played to Trafigura's strengths as a nimble and flexible global trading firm well-positioned to address sudden market dislocations and narrow and changing windows of opportunity.

Our business grew significantly during the year. Daily volumes handled rose 42 percent from 3 million barrels per day (bpd) in 2015 to 4.3 million bpd by the end of 2016. This marks the continuation of a four-year run of growth which has more than doubled the size of Trafigura's oil and petroleum products book since 2012. The biggest regional highlight was Asia, where our sales volumes grew 80 percent year-on-year. In terms of growth in individual products fuel oil was a stand-out and the LNG desk continued its market-leading expansion, while adding capacity to trade natural gas in the US and Europe. Most gratifying to report is the fact that all of our product lines without exception generated a positive net profit, making Trafigura's oil business the most thoroughly diversified in the industry.

Crude oil vessel at Corpus Christi terminal, Texas, US.

The key events of the year were the end of the US ban on crude exports in December and the emergence of Chinese private-sector refiners as international players, in the first instance as purchasers of crude. In both cases Trafigura was at the leading edge. We built on our strong market position in southern US shale fields and our unrivalled access to infrastructure in the US, Europe and further afield to export significant volumes of US crude. We also built strong relationships with the Chinese refiners in addition to the state-owned oil majors, and grew our Chinese business significantly.

The year saw us taking our origination business to a new level featuring increased geographical and product diversification. Our purchases increased significantly from Russia, North America and the Middle East among other regions, thanks to strong relationships with producers. We have also developed an increasingly strong set of commercial relationships with refiners in the US, Europe and Asia. We devoted considerable effort to strengthening our business development team in India in order to capitalise on increasing pace of growth in Indian oil demand.

Two important strengths of our operation in 2016, as in previous years, were the quality of our people and our culture of global collaboration and teamwork – both within and between individual trading desks. We saw significant progression of key talent to leadership positions, drawing on our deep bench-strength and developing the next generation of senior managers. These movements have helped foster an environment in which the collective result is of paramount importance, and where communication and information sharing between trading hubs in different regions are incentivised. Trafigura sees this culture as a significant competitive advantage.

Looking ahead, we expect crude and product markets to continue to struggle with over-supply and prices to remain volatile, with sentiment torn between bearish fundamentals and OPEC efforts to put a floor under the crude market. It remains unclear what effect the agreement by the producer cartel in December to limit production will have on the market in 2017, to what extent output will in reality be curbed, and therefore when the much anticipated balancing of the market and commencement of stock drawdowns will occur.

We will continue to focus on being constantly alive to rapid changes in the market and best positioned to identify new trading opportunities. In particular we will be looking to strengthen our position further in key growth markets such as India and China and to enhance our relationships with the world's refiners.

CRUDE OIL

The dominant story in the global crude market in 2016 was one of over-supply and a continued build-up of stocks despite output declines in some key production centres such as the US. Saudi Arabia's 2015 decision to maintain production in order to win back market share continued to play out. Iran's return to international markets following the partial lifting of sanctions added new supplies, as did the ending of the US ban on crude exports. Strong refining margins for much of the year kept demand strong, though they eroded somewhat in the second half prompting some trimming of refinery runs. As a result, the much-anticipated balancing of the market and commencement of stock drawdowns remained elusive at year-end. OPEC's protracted discussions on curbing production remained a wild card, but the practical implications of the cartel's December

Fuel storage at Corpus Christi terminal, Texas, US.

agreement to establish a production ceiling will only become clear as the market has the chance to assess compliance with the proposed output cuts in the coming weeks and months.

Against this backdrop Trafigura's crude oil trading team had another strong year, featuring increased volumes, intense activity in all important pricing centres, and sustained profitability after the record performance in 2015. The fall in tanker rates to historic lows helped to incentivise increased global arbitrage business. At the same time we continued to build our already strong customer relationships among producers and refiners to increase access to and placement of barrels. Russian crude remained an important component of the book, thanks to our developing commercial relationship with Rosneft. A highlight of the year was the performance of our US business and the development of European refining to take US exported crude. This was complemented by our unrivalled access to port and storage infrastructure in Corpus Christi (Texas), St James (Louisiana), Milford Haven (UK) and Ashkelon and Eilat (Israel). We maintained volumes gathered from the Eagle Ford shale despite declining production and added new barrels from the Permian basin further inland. In consequence we were able to take a leading position in the revived US crude export trade, shipping regular cargoes to refineries in Europe and beyond.

On the demand side, the most important developments were in China, where we saw increased business with the state-owned oil corporations and a surge in purchases by private-sector refineries newly licensed to import crude. These refineries constituted an important new market and we reinforced our team in China to establish strong relationships with them, via a dedicated new office in Qingdao.

Looking forward, we expect a volatile crude market to continue to offer significant trading opportunities. In a market that will remain highly competitive, our competitive strengths are our access to global infrastructure and our culture of efficient communication and information sharing between the different pricing centres, which between them give us truly global reach. Our priorities will include working to extend our presence in arbitrage flows from the US and Latin America into Asia. Having built a strong origination structure, we are looking to develop even closer relationships with refineries in order to increase our coverage of the main crude shorts.

GASOLINE

The global gasoline market presented a number of challenges in 2016, of which the most notable was a growing surplus of supplies and build-up of stocks. Refinery margins were strong for much of the year on the back of the over-supplied crude oil market, incentivising increased gasoline production. Refineries added to the glut by switching yields in favour of gasoline at the expense of diesel in the first quarter. The surplus was further exacerbated by a sharp increase in gasoline exports from China. In consequence gasoline remained in a low flat price environment for much of the year. This had the positive effect of stimulating healthy demand growth in key consumption markets such as the US where demand grew between 2 and 3 percent year-on-year, but demand was still insufficient to absorb additional supplies and even in the peak summer season market structures remained weak.

Trafigura's gasoline trading book remained dynamic throughout the year and turned in a strong performance with increased volume. Key strengths in this volatile market were our large storage footprint around the world and our carefully managed global system of physical short positions centred on third parties and the trading relationship with downstream investment, Puma Energy. One of our top priorities was growing markets East of Suez. We built our presence in both China and India, shifted some key personnel to hubs with especially high growth potential such as Singapore, and significantly increased physical volumes in the rapidly evolving Far East market. In addition we shifted the focus of our US activity towards the East Coast in order to maximise our exposure to increasing US gasoline consumption. Both of these examples stem from our belief in a global portfolio and therefore solid, stable strength of earnings in an evolving global market. We continued to develop strategic relationships with key producers and consumers, conscious of the need to add value for producers that increasingly market their own product and to provide top-level service and performance for consumers.

Looking ahead, the forward curve of refinery margins suggests we will see increasing pressure on the refining sector in 2017. The key question in assessing the prospects for supply and demand is how the global crude oil balance plays out and whether rising crude prices will compress refining margins and lead to run cuts. Another key development is the global trend towards low-sulphur fuel as the US shifts to a 10 ppm standard from January 2017. We expect this to have a strong impact on flows and valuations and believe we are well positioned to benefit.

FUEL OIL

The global fuel oil market continues to experience significant changes in supply and demand dynamics, and overall tightened in 2016, in large part due to a decrease in Russian exports. The market recently traded into backwardation despite other oil markets remaining in contango, reflecting the improving fundamentals.

Trafigura's fuel oil trading team set high expectations for the year both in terms of volume growth and profitability. It achieved its targets, growing volumes fourfold and hiring a number of additional traders to capitalise on expanding opportunities. The team has built an effective global arbitrage culture, a significant and sustainable feedstocks business, and is developing closer ties to end-users in the bunker market. Russia, Singapore, the Arabian Gulf and US West Coast were significant growth areas while we struggled to achieve our goals in the Caribbean market.

Looking forward, we continue to see new opportunities. Although fuel oil is a declining product overall , given improving efficiency in the global shipping fleet and a focus in refining on higher-value products, we are still seeing some new sources of demand, notably in power generation where fuel oil can offer more competitive logistics than LNG and coal in certain locations. We expect the market to remain tight in 2017 as the global refining industry continues to upgrade and thus produce less fuel oil. Our focus will be to consolidate our business after a year of rapid growth and ensure we capture the full value of our market position.

MIDDLE DISTILLATES

The most significant change shaping global Middle Distillates markets in 2016 was China's progress towards implementing a low-sulphur fuel standard. China, which has historically allowed sulphur content of up to 500 ppm, is due to reduce this to 10 ppm in January 2017. To prepare for this change the Chinese oil majors have been progressively upgrading their refineries in the last 18 months to produce lower-sulphur fuel with increasing consistency.

The new standard is similar to those in Europe and other western markets, and the result of the change, together with a dip in manufacturing demand in China, has been to create an exportable surplus of diesel which added to global over-supply. Overall global demand was steady during the year. In India, a hot summer caused a spike in consumption and a reduction in exports, while Indonesia moved from net importer to balanced.

For Trafigura, these developments played to our strengths by turning what had been a largely regional low-sulphur business featuring seasonal arbitrage opportunities into a truly global market year round, in which our global arbitrage model can operate to best effect. Trafigura's Middle Distillates team is a top-three player, operating a global network which can react quickly to shifts in supply and demand from our hubs in Singapore, Geneva and Houston.

Our response to the emergence of significant Chinese exports was to add trading strength in Singapore and to lease additional storage capacity in Asia in the first half of the financial year, when the market was in steep contango. Volume handled by the desk grew by more than 25 percent year-on-year, with exports from China and increasing flows from Russia making up significant parts of the increase. The growth in trade and margins were also significantly supported by the weak state of freight markets.

Over the coming year we expect the market to remain over-supplied, as exports from China's private refineries progressively add to the flow from the state-owned oil majors. Demand will also grow, driven by urbanisation in developing countries, while low freight costs will continue to provide support for the business. We intend to pay increasing attention in the coming months to building our position in jet fuel, building on the significant footprint established in this market by Puma Energy.

NAPHTHA

Trafigura is the world's leading independent naphtha trader and grew volumes to an all-time high in 2016, a 50 percent year-on-year increase. The global market was driven by a significant reduction in Asian net arbitrage demand – the first reduction of the net Asian naphtha short in more than five years – as a result of structural changes in the Asian petrochemicals and refining business. These included the growth of LPG as a competing feedstock in the petrochemical complex, increased domestic supplies from Chinese refineries, and new production coming on stream from splitters in north-east Asia, Singapore and the Arabian Gulf.

With the east absorbing significantly lower volumes, western markets were long, but rising western consumption of gasoline drove increased use of naphtha as a blending component that helped to absorb the surplus. The Americas became more of a self-contained regional market as naphtha production from US shale formations plateaued, and decreased in certain regions. These volumes went into gasoline demand and other regional applications.

These changing trade patterns placed a premium on teamwork both within our naphtha desk and with other Trafigura trading teams. Our naphtha traders worked especially closely with the gasoline desk in order to understand and react nimbly to changes in the relative value of different blending components. We also added trading capacity in Houston in order to derive maximum benefit from the continuing expansion of our footprint in south Texas, where Trafigura has throughput rights and a 20 percent stake in Buckeye's Corpus Christi storage and export terminal.

The Golar Ice and Golar Crystal conducting an open water ship-to-ship transfer of LNG in Gibraltar. Both vessels were under Trafigura control during this operation.

Looking forward, we expect naphtha to continue to lose ground in the petrochemical complex to other feedstocks such as LPG and ethane, with new ethane crackers coming online in the US and elsewhere. Key to success will be finding ways of maximising other uses of naphtha into gasoline blending, splitting, or as a diluent for crude oil. Our strategy will therefore focus on ensuring maximum integration within our team, to be the first mover on changes in arbitrage flow, as well as on working with other desks within the Oil division to maximise the relative value of products across the naphtha/gasoline/condensate/crude oil space.

CONDENSATE

Trafigura maintained its status as one of the leading international condensate traders in 2016, capitalising on strong relationships with western suppliers and eastern end-users and supplying Asian markets from sources as diverse as the US Gulf, West Africa, Europe and Latin America. Global demand for condensates is rising, with splitting capacity in Asia showing especially strong growth. But we chose to focus on improving margins during 2016 on the basis of the strong market position we have already achieved, rather than further growing volumes.

The dynamics of the condensate market changed radically during the year as a result of the vote by the US Congress in December 2015 to end the 40-year-old ban on crude oil exports. Prior to this decision, exporting condensate from the US – while possible – was a difficult undertaking because of the need to demonstrate that an export cargo contained no commingled crude molecules. When the ban was lifted, crude and condensate became essentially interchangeable in export markets. Trafigura, with its significant position in gathering and transporting condensate from the Eagle Ford shale in Texas and with its stake in the Corpus Christi splitter, was well placed to benefit and during 2016 became the first company to book a Very Large Gas Carrier (VLCC) carrying Eagle Ford condensate to Asia.

Key to the condensate team's success is strong and transparent relationships with our long-term customers. We are working in many niche markets, and such communication allows us to be the first mover on many opportunities. We expect the dynamic conditions seen in 2016 to persist over the next year, with the continuing increase in Asian splitter capacity further enhancing east-west arbitrage opportunities.

LNG

The global LNG market continued its rapid expansion in 2016. Prices enhanced the competitiveness of LNG as a fuel for power generation and drove a broad-based increase in demand, notably in Egypt, Pakistan, India and China. On the supply side, some important production projects took longer than expected to come on stream and some existing facilities experienced difficulties.

At the same time the growth in liquidity observed in the past two years accelerated at a pace faster than many had expected. More and more market participants now realise that market liquidity is a solid basis for security of supply, creating a virtuous circle of increasing confidence and increasing participation in the spot market. Although, disappointingly, the growth in liquidity has to date not enabled the creation of a widely-used price benchmark for hedging purposes, we continue to believe this is just a matter of time, and the launch of an LNG index by Singapore's SGX exchange was a promising step in this direction.

Trafigura, which established a leading position in LNG trading three years ago, continued to grow its business, with a 53 percent year-on-year expansion in volumes and an increased profit. The trading team expanded from its existing bases in Geneva and Houston to Singapore. In Europe and the US, we hired additional traders to start a regional natural gas trading business. The intention is to establish a sustainable physical gas business in Europe and the US, creating synergies where possible with the LNG book as energy market liberalisation continues and LNG and natural gas markets converge.

In another innovation during 2016, Trafigura has launched an LNG infrastructure business. We expect that lower cost, modular and flexible infrastructure will provide a powerful support for our trading business as infrastructure assets have for other Trafigura trading desks since the company's inception.

Over the coming months, we expect a further increase in global LNG supplies with prices that will stimulate new demand. Our priorities will be to capture new volumes, optimise our infrastructure portfolio and continue to build our natural gas business for long-term success.

LPG

The global LPG market provided a challenging backdrop for trading in 2016 owing to a lack of arbitrage opportunities in propane. In particular, the economics of supplying LPG from the US to eastern markets were difficult for much of the year.

However, the Trafigura LPG team succeeded both in growing volumes and maintaining profitability on the new business. Flows handled grew 58 percent year-on-year while margins remained steady, thanks to a combination of numerous new business relationships and creative work in optimising our portfolio. Key growth areas included Asia, Africa and Latin America. The desk was particularly pleased to have maintained flows under challenging conditions in China and Venezuela, and to have captured new markets in East and West Africa.

Trading benefited overall during the year from a fall in freight rates, resulting from a substantial increase in the global fleet of VLCCs in recent years. On the other hand, managing freight positions in this market was not always straightforward. Similarly, the challenging market conditions in some key territories led to an increased focus on credit issues, and an increased emphasis on providing financial solutions to clients as part of our commercial offer.

Our focus in 2017 will be to continue growing the book in terms of profitability and volumes – not least by maintaining the markets captured in 2016. We expect that to entail offering our clients innovative solutions in markets that will remain challenging.

BIODIESEL

Biodiesel remained a challenging market in 2016, with low oil prices essentially eliminating the potential for discretionary blending of biodiesel. Uncertainty concerning regulatory matters in the US and Europe – ranging from US tax policy and renewable fuel volume requirements to European Union countervailing duties on various biodiesel imports – created additional complications for the business. The commitment of consumers and regulators around the world, however, is unwavering in calling for increased penetration of renewable fuels as a source of low-carbon intensity energy. In response to this environment, Trafigura maintains expertise to evaluate and act on market movements as they occur.

DT GROUP

DT Group

$2.0bn	$1.6bn
Total assets (2015: USD1.8 billion)	Sales revenue (2015: USD3.9 billion)

DT Group is a 50-50 business venture between Trafigura and Angolan management and investment firm Cochan, focused principally on the Angolan market. It leverages the market capabilities and financial strength of Trafigura with the local knowledge and networks of Cochan.

In 2016, the Angolan economy continued to suffer from the impact of low oil prices. But the Government made headway in stabilising the overall economic situation and launched a significant restructuring of the national energy sector. DT Group focused its activities during the year on its core trading and shipping activities. Trading entities DTS Refining and DTS Commercial continued to trade refined petroleum products such as gasoil, bitumen and jet fuel with state energy company Sonangol. DT Shipping continued to charter vessels to Sonangol Distribuidora. In addition our specialist unit DT Agro sought to develop its commercial farming operation, demonstrating how modern technology and techniques can improve yields in growing fruit and vegetables.

In 2014-15 DT Group consolidated its business in Angola, withdrawing from a number of previous lines of activity and refocusing on core activities. In the coming year we intend to maintain this focus, based on a close commercial relationship with Sonangol and on partnership with the Angolan subsidiary of Puma Energy, Pumangol.

For further information please visit **www.dtsholding.com**

METALS AND MINERALS TRADING

AMIN ZAHIR
Global Head of Refined Metals and Concentrates

JULIEN ROLLAND
Global Head of Coal and Iron Ore

Trafigura is one of the world's largest metals and minerals traders. Despite challenging conditions, the division continued to grow, trading 59 million tonnes in total.

HIGHLIGHTS

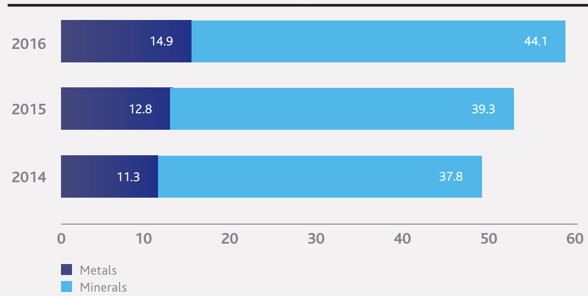
- Trafigura maintains its position as market leader in concentrates and refined metals.
- Volumes traded increase by 13 percent.

35%
Contribution to global revenue (2015: 33 percent)

59.0mmt
Total volume traded (2015: 52.1mmt)

Metals and Minerals total volume traded (mmt)	2016	2015
Non-ferrous metal concentrates	**8.2**	7.6
Non-ferrous refined metals	**6.6**	5.2
Coal	**37.8**	35.3
Iron ore	**6.4**	4.0
Total	**59.0**	**52.1**

Metals and Minerals total volume traded (mmt)



STRATEGY AND PERFORMANCE

The global metals and minerals sector saw a period of continued transition and flux in 2016. As a general theme the 'new reality' of a slowing Chinese economy and resulting decrease in consumption has dramatically reshaped the outlook for producers. In some cases it has already led to primary production cuts; in others, further downward price pressure will be required to bring about the needed market adjustment.

The past year has been challenging for many industry participants so it was particularly encouraging to see the volumes across our Metals and Minerals Trading Division grow by 13 percent to 59.0 million tonnes from 52.1 million in 2015.

This growth is a continued testament to Trafigura's core strategy. We seek to differentiate ourselves from our competitors by offering our business partners innovative solutions that utilise our various strengths in operations, logistics, credit and finance – all supported by a truly global presence.

Although we do have assets with price exposures, these exposures are minimal within the scope of our trading activities. As a result of this we can operate with genuine independence and have greater flexibility to focus and prioritise the interests of our business partners.

As we approach 2017 we see many headwinds facing the metals complex and within this environment we hope to further forge long-term partnerships with producers and processors for mutual benefit and growth.

COPPER CONCENTRATES

The global copper concentrates market featured increases both in mine supply and in smelter demand, with the continued ramp-up of new mining projects such as Las Bambas, Cerro Verde and Toromocho in Peru and the commissioning of several large new Chinese smelters. The result was a market that was broadly balanced, with volatility stronger in the first half than the second. The growth in mine production and smelting demand was evident via a 94 percent year-on-year increase in Peruvian concentrate exports to China which still remains by far the largest source of smelting demand and the only country with new greenfield smelters. Another promising step was the wider implementation of tolling books for Chinese copper smelters allowing them to export refined copper and silver bullion without incurring a pricing bias which should improve the liquidity in some niche segments of the market.

Copper cathode at Jinchuan Group's copper smelter in Fangchenggang, China.

Trafigura's copper concentrates trading desk, which is the global market leader, exceeded its targets for the year and increased volumes handled as well as contribution to net profit year-on-year. We have a strong position supported by world-class infrastructure in Peru, Mexico and Spain and strong relationships as a key raw material supplier and overall service provider to miners and smelters alike.

The commissioning of the new Impala Terminals logistics facility in the Spanish Port of Huelva has allowed the desk to diversify its marketing services to mines in the Andalucian copper belt, while giving us significant trading flexibility both within Europe and into Asia. Our investment with Jinchuan in the Fangchenggang smelter has now operated successfully for over 12 months and is adding significant value for both companies.

As we consider the prospects for coming months, copper smelting still looks reasonably healthy, despite lower premiums being received for copper cathode and blister. Final demand for copper, however, remains subdued, and with smelters still incentivised to bring on additional capacity, we believe there is a possibility that an over-supply of metal may force some market corrections. Our priority for the coming year will be to maintain profitable market leadership by developing creative and competitive solutions for our clients in the face of increasing competition.

ZINC CONCENTRATES

The global zinc concentrates market rallied strongly during 2016 as a supply deficit emerged. The principal driver was a fall in supply resulting from the closures of important mining operations such as the large open-cut Century Mine in Australia and Lisheen Mine in Ireland, as well as from a slowdown in mine production by Glencore. Demand, on the other side remained relatively stable while prices moved up throughout the year. As important was a significant shift in market flows, with a wider diversity of material from a wide variety of origins being imported into Europe as well as a 40 percent decrease in imports into China.

The Trafigura trading team took a highly analytical approach to the evolving market balance and on that basis was able to increase traded volumes, market share and achieve the objectives set for the year. We have a highly diversified book by geography as well as by counterparties, with Europe, Australia, South Korea and Japan all playing an important role alongside China. For 2017, the big question is how quickly supply will come back onstream in response to higher prices and in particular when Glencore will ramp-up its mines again. In general we expect a tougher market environment with increased competition around the globe.

LEAD CONCENTRATES

In 2016, Trafigura's trading team increased market share and achieved its objectives set for the year. Supply was partially curtailed with the closure of the Century Mine in Australia and the Lisheen Mine in Ireland as well as some others across the globe. Important changes on the demand side, notably with the expansion of primary smelting capacity by Korea Zinc during the year. At the same time Chinese imports reduced by about 9 percent year-to-date overall but the appetite for high-silver lead concentrates in China grew as a consequence of the adoption at mid-year 2016 of a tolling licence for silver concentrates. Prices were stable for much of the year, with a spike during the last few months. For the coming year, we expect the market to continue along similar lines. We will focus on preserving our market leadership by exploring new opportunities and maintaining our existing long-term relationships. The market environment is likely to become tougher due to increased competition, and to continue to be influenced by stricter environmental regulations – a development we follow closely.

NICKEL CONCENTRATES

After a significant period of metal over-supply, stock build and low prices, the global supply-demand balance for nickel concentrates started to tighten late in 2016 as a number of producers placed their mines on care and maintenance. Prices bottomed out in the first half of the year and recovered somewhat in the second. The Chinese market remained the most significant influence on the demand side, with a relatively strong domestic market for stainless steel supporting demand for nickel pig iron (NPI) and ferro-nickel.

Against this backdrop Trafigura's relatively new nickel concentrates trading team – ranked number two globally by volume – continued to grow its business from a small base, in part by trading stocks deliberately carried over from 2015. We were delighted to increase our business with western smelters, for whom mine closures have impacted supplies. The pricing environment and associated risks and exposures remained challenging, given the relatively illiquid nature of the market.

Looking ahead, we expect the recent tightening in the supply-demand balance, drawdown of stocks and price recovery to continue into 2017. There is also the possibility of a supply-side shock in laterite, used to produce NPI, as a result of additional export restrictions from the Philippines. Longer term we expect rising demand for nickel units in particular from battery manufacturers. Next year we will be looking to further diversify our sources of concentrate supply by geography and by counterparty, as well as building trading capacity in ferro-nickel and laterite.

ALUMINA

The global alumina market in 2016 was dominated by China. A significant build-up in domestic alumina refining capacity over the previous year to match growing aluminium production made China increasingly self-sufficient, producing more than half the world's supply both of alumina and aluminium. One consequence was the accumulation of a significant global alumina surplus which caused prices to fall sharply at the end of calendar 2015. The market remained volatile as periodic price rises brought capacity back on stream, only to be shuttered again when prices fell in response. In August, increased alumina demand from new aluminium smelting capacity, coupled with transportation bottlenecking within China, caused the alumina price to start increasing. Elsewhere, permanent alumina refining capacity closures took place in the US while new capacity came on stream in Indonesia.

Trafigura's alumina trading team had another satisfactory year, increasing traded volumes by 25 percent. We will maintain our focus on trading the Chinese domestic and international market, based on our strong relationships with refineries and smelters. Given the financial stresses in the sector, in particular in China, credit was an important tool for business development both with alumina refiners and aluminium smelters.

We expect the patterns established in 2016 to continue into next year, with prices oscillating in response to capacity closures and openings. The Chinese market will continue to grow in importance thanks to rising aluminium production, and will thus remain our principal focus.

REFINED METALS

The global market for refined metals presented challenging trading conditions in 2016, featuring significant supply surpluses, depressed prices and reduced trading liquidity resulting from the withdrawal from the market of a number of previously important players. Trafigura's trading teams performed well, increasing both volumes and profits year-on-year and developing important new customer relationships, although margins per tonne were in general lower than in 2015. Our principal refined books cover copper cathode and blister, aluminium, lead, zinc and nickel, and we also trade some silver and scrap.

In refined copper, we saw a substantial increase in volumes and became the largest trader, building on strengthened relationships with producers in Latin America and Asia to source additional tonnes that boosted the book by more than 30 percent. The copper market is transitioning from a position of balance to one of significant over-supply and weaker demand, notably in the most important market, China. In consequence, prices fell sharply at the beginning of the year and stocks built, as exchange warehouses attracted units in this low premium environment. On a more positive note, we see significant upside in the Indian market in coming years, and to capitalise on rising consumption there Trafigura formed a joint venture with India's largest copper cable manufacturer to build a copper wire rod manufacturing facility in the state of Gujarat.

In aluminium, a chronic stock overhang continued to weigh on the market, creating a difficult trading environment. However, supply and demand were more balanced, and aerospace and automotive demand for aluminium remained strong. Price volatility reduced with prices staying in a range between USD1,500 and USD1,700 per tonne. LME warehouse queues tailed-off and the market appeared to have entered a new era of flat price spread and physical premium stability. A global focus on value-added production, notably in China which is increasing exports of semi-finished products, is intensifying competition in the aluminium downstream sector.

The Trafigura trading team delivered improved performance compared to last year despite the difficult backdrop, increasing volumes handled and profit despite tighter margins. We maintained existing consumer and producer relationships and developed new ones, as well as staying nimble to take advantage of new opportunities. We developed substantial physical offtakes around the world and maintained a strong position in China.

In refined zinc, the market moved from its previous position of surplus into a small deficit for the year and zinc prices rallied strong during the year. However as stocks remained high, premiums did not move significantly, and a lack of volatility in premiums was one of the main challenges for trading. The Trafigura team performed well, with strong trading in all key regions and performance enhanced by the recruitment of new talent. Despite weakening Asian consumption we increased our Asian market share. We also grew our business substantially in Europe, thanks to our strong relationship with the leading metals processing group, Nyrstar, in which Trafigura holds a minority stake.

In the next 12 months, we will maintain focus on the Asian market. We will also pay increased attention to developing closer relationships with end-consumers and deepening our understanding of the evolving supply-demand balance. These measures will become more necessary as a result of the shrinkage of market liquidity that is taking place with the withdrawal of a number of previously active traders and banks, and that is likely to make carrying units for the spot market more expensive.

In refined lead, the market was in increasing over-supply with stocks building. However, prices spiked towards the end of the year as expectations grew that the supply-side was coming closer to a tipping point where smelter capacity cuts will become unavoidable. Trafigura's trading performance and outlook were similar to those in refined zinc.

IRON ORE

The global iron ore market remained severely depressed in 2016, with the CIF China price falling below USD40 per tonne in the first quarter.

Iron ore being dispatched in Minas Gerais region of Brazil.

Prices were boosted temporarily in March by increased demand from Chinese steel mills in response to financial stimulus measures, but the effect soon wore off as steel prices plateaued and a rise in the cost of metallurgical coal took its toll on steel mill margins. Meanwhile, increasing supplies from the majors, and from new sources such as Australia's Roy Hill, added to the glut and pushed iron ore prices down.

Trafigura's iron ore trading team had a better year than in 2015. We started operations at our major new Porto Sudeste export terminal in Brazil, exporting nearly 7 million tonnes at an accelerating pace, and we worked to secure long-term supply agreements in the Brazilian mining sector with the support of structured finance offerings. We were also active in third-party business in countries such as Mauritania.

Going forward, we expect iron ore to remain a difficult market, with new supplies still coming on stream as the majors seek to displace marginal producers and the global steel business under unremitting pressure. However, we have good access to cost-competitive supplies in Brazil and expect to ramp-up exports through Porto Sudeste to 15 million tonnes in 2017 and 20 million the following year.

COAL

After years of structural weakness, surplus supplies and falling prices, the global market for thermal coal showed signs of new life during 2016, principally as a result of measures by the Government of China, by far the largest coal producer and consumer, to curb production. The so-called '276-day' rule required mines to reduce their output by 16.4 percent across the board; tighter enforcement of health and safety rules forced the closure of many unsafe mines; and a rainy summer disrupted domestic supply routes. As a result, China imported 30-40 million tonnes more seaborne thermal coal than expected, catching the global market unawares and sending spot prices soaring between March and September. The spike in Chinese imports redirected trade flows, with Colombian exports in particular shifting from the Atlantic basin to the Pacific. On the other hand, Indian import demand shrank by 20 million tonnes, as the Government took measures to discourage imports in favour of the state-owned producer, Coal India. In mature markets such as Europe, coal continued to lose ground to cleaner fuels.

Trafigura's coal trading team had a good year, increasing its contribution to net profit and boosting traded volume by 7 percent from 35.3 million to 37.3 million tonnes. In addition we handled 12-13 million tonnes under our marketing agreement with Bowie Resource Partners in the US. Our most important customers were India and China, and we significantly increased purchases from Indonesia and South Africa.

Market strength has started to ebb recently as China has introduced various measures to bring supply back to market, at least through the heating season. Chinese domestic prices have come down from their peaks and demand elsewhere remains tepid. In India, the other great source of demand growth, the Government will continue to promote domestic production over imports. The recent 'demonetisation' policy has also created a short-term demand shock in India, where a significant share of coal traded in the domestic market is still delivered in small parcel sizes via cash transactions. Further ahead, there is much uncertainty over the future for coal demand. In China, coal still represents 70 percent of the overall energy mix, but the Government has clearly signalled it wants to reduce this over time, and the peak in Chinese coal burn may come sooner than previously expected. Trafigura sees an opportunity to continue to grow its coal trading book, thanks to decisions by some trading firms that used to play an important role in the business to withdraw or reduce their exposure.

SHIPPING AND CHARTERING

Trafigura Maritime Logistics arranges shipping and freight services to Trafigura's various commodity trading teams as well as to third-party clients. It operates as a service provider securing competitive and reliable freight for in-house oil, metals and minerals traders. The Wet and Dry Freight desks also operate respectively as profit centres in their own right.

All commercial shipping and chartering activities are managed out of Trafigura's key regional offices. All post-fixture operations, which include issuing voyage orders, completing stowage plans, negotiating with port agents and handling demurrage claims are managed centrally from our Athens office.

3,878

Shipping and Chartering fixtures
(2015: 2,744)

2016 Wet and Dry Freight Activity	Wet	Dry
Tonnage shipped	**152mmt**[1] 2015: 106mmt[1]	**30mmt**[2] 2015: 32mmt[3]
Number of fixtures	**2,974** 2015: 1,959	**904** 2015: 785
Average time-charter fleet[4]	**65-70** 2015: 85-90	**35-40** 2015: 40

[1] Includes third-party tonnage and internal tonnage fixed internally and externally.
[2] Includes 14mmt external customer tonnage.
[3] Includes 21mmt external customer tonnage.
[4] A vessel on hire for longer than three months.

Trafigura is a leading player in global shipping and a key partner for ship-owners around the world. Our freight desks work closely with the company's trading teams, who rely on real-time freight pricing to structure physical arbitrage opportunities.

The shipping and chartering desks faced a challenging environment in 2016 in both the wet and dry sides of the business and accordingly reduced their exposure in terms of vessels on time charter. The wet freight desk recorded a significant increase in the number of fixtures and in volumes carried while in dry freight, fixtures increased but volumes carried fell. Both sides of the business recorded a profit for the year.

WET FREIGHT

The positive market backdrop and significantly longer freight position taken that underpinned our historically strongest wet freight performance in the previous financial year was turned on its head in 2016. Despite the severe drop in freight rates, a successfully executed hedging strategy early in the year, while freight was still firm, set us up for another strong year. Weaker freight rates were caused by many factors including increasing vessel supply and lack of oil arbitrage movements. In terms of fixing volumes, the team went from about 1,950 fixtures in 2015 to more than 2,970 in 2016.

In further response to the weak fundamentals, we substantially reduced our time charter fleet during the year across all market segments. We also successfully sold the remaining six ships we had previously ordered from a shipyard in Guangzhou, China to new owners under sale-and-leaseback agreements – reducing our ownership of product tankers to zero by the end of the fiscal year.

One of our strategic aims is to extract full value of the cargo infrastructure which saw significant growth throughout the year. Freight exposure has been concentrated where Trafigura's cargo programme is strongest – thus limiting downside risk by maximising capacity utilisation.

With an increasing cargo programme we see continued value in building closer ties with our biggest freight partners. In May, we hosted an event in Copenhagen for 22 chief executives and board members of our largest freight partners among gas, crude and product tanker owners. The aim was to foster further senior-level trust, to give ship-owners greater insight into our business model, and to position Trafigura further as a transparent partner with a large and growing volume of cargoes available to place in the market. In 2016, 21 percent of all Trafigura wet

cargoes were carried on Trafigura-controlled tonnage – meaning that 79 percent needed to find a home with third-party ships.

The current rate environment is very challenging and we expect weaker wet freight performance for 2017. We see weak market fundamentals continuing through 2017, including further supply growth offset marginally by higher scrapping activity if earnings remain at current levels in certain segments. For the wider evolution of the market much will depend also on oil market arbitrage flows and we will be monitoring this closely to be able to respond to any physical market shifts. With a smaller fleet and an expected continued growing cargo programme we expect our third-party volumes will increase significantly in 2017.

DRY FREIGHT

In the dry freight market, conditions were especially challenging in 2016 with the Baltic Dry Index reaching an all-time low on 10 February. While global seaborne cargo volumes remained healthy and continued to grow by 1.5 – 2 percent year-on-year, the huge over-supply of vessel capacity weighed heavily on the market.

Trafigura's dry freight desk achieved a positive result for the year, with the key to success being limiting counterparty exposure, retaining a lean and nimble market position, and focusing on niche markets where we have a strong competitive advantage such as the west coast of Latin America, moving concentrates from Chile, Peru and Mexico and iron ore from Porto Sudeste, the major Brazilian export terminal jointly owned by Impala Terminals and Mubadala.

As mentioned, counterparty risk was a major focus through the year and will continue to be for the foreseeable future in shipping given the immense financial pressure on many owners and operators. This was highlighted by the bankruptcy filing by the South Korean container giant Hanjin Shipping in August. While Trafigura had no direct exposure to this event, it underlined how important it is in distressed markets for cargo owners to understand the true financial position of ship-owners with whom they contract and to this end our team spent significant effort during the year vetting ships, owners and working with Trafigura's credit department to control exposures.

In 2017, we expect the distressed market conditions to continue and we will maintain our conservative approach. However, there are signs that the market may start to turn positive in the next one to two years with a record volume of dry freight tonnage being scrapped, no new ship orders being placed and seaborne cargo continuing to expand.

For further information please visit
www.trafigura.com/our-services/shipping-chartering/

IMPALA TERMINALS

NICOLAS KONIALIDIS
CEO, Impala Terminals

Impala Terminals is a multimodal logistics provider focused on export-driven emerging markets. We own and operate ports, terminals, warehouses and transport assets which together offer end-to-end logistics solutions for dry and liquid bulk cargoes, general cargo and containers.

HIGHLIGHTS

- Record volumes of refined metals exported from the African copper belt.
- Freight forwarding business has record year moving 75,000 containers.
- Completion of the first phase of construction of the Huelva terminal in Spain.
- Parana river barge fleet doubles in size to meet demand.

$375.8m
Sales revenue
(2015: USD340.2 million)

18
Countries of operation

1,625
Employees
(2015: 1,749)

23
Locations worldwide

Impala's barge operations on the Parana River, Argentina.

RAMPING-UP COMMERCIAL OPERATIONS

In 2016, Impala Terminals focused on ramping-up commercial operations at a number of important new projects, including our multimodal transport system in Colombia, the Porto Sudeste iron ore terminal in Brazil and the Huelva metal storage and blending facility in southern Spain. There was also an ongoing emphasis on securing cost savings and efficiency improvements across the company. Having previously divested non-core assets in China, Belgium and the UK and restructured the remaining operating companies within Impala, recurring businesses performed well, with EBITDA growing by approximately 50 percent year-on-year.

The market environment has been challenging in the countries and commodities in which we operate, with the iron ore market depressed, crude oil production in Colombia reduced, and refined metals from Africa struggling with low prices and over-supplied markets. However Impala was able to source and handle increased volumes and generate margins in each of these regions, demonstrating the important contribution that its strong logistical platform can make to Trafigura Group business. For example, despite the weak price environment for refined metals, we were able to export record volumes from the African copper belt, in part by changing the export route out of DRC and Zambia via the ports of Dar es Salaam, Durban, Beira and Walvis Bay.

We also continued to invest in new operations including our non-ferrous blending and storage terminal at Huelva in Spain, our growing container freight forwarding business and a new barging project along the Parana River linking Argentina, Paraguay and Bolivia. Our freight forwarding business had a record year, contributing positively in each region moving 75,000 containers of which 35 percent were third party, and adding significant value to our existing warehouse operations.

GROWTH IN LATIN AMERICA AND SPAIN

In Colombia, we have invested more than USD1 billion in an inland port at Barrancabermeja and fluvial equipment, providing multimodal logistics services linking the industrial heartland to the Caribbean ports at Cartagena and Barranquilla. The liquid terminal at Barrancabermeja will be completed by the end of 2016. The port is already handling all types of Colombian crude and naphtha with volumes reaching a peak of 40,000 barrels per day during 2016, and we look to increase our services as more tank space comes on line towards the end of 2016. At the same time we are importing naphtha by barge for use by oil producers as a diluent, thereby maximising the asset utilisation.

Impala's new terminal in Huelva, Spain.

On the dry side, we have handled containers, general cargo and project cargo during 2016 and have signed liner services with Maersk, Sealand and Hapag Lloyd who collectively control the majority of the container market in the Caribbean. Separately, we exited our involvement in the Ferrocarril del Pacifico (FDP) railway concession in the west of the country, after a local operator was identified.

At the port of Huelva on the southern coast of Spain, our new concentrates blending and storage terminal ramped-up services to the regional mining industry and in addition handled volumes from further afield in its first full year of operations, handling approximately 1 million tonnes in the period. In April, Impala concluded a shareholder agreement with Berge Infraestructuras y Servicios Logisticos SL, a division of Spanish group Berge y Cia, providing for the transfer of a 20 percent stake in Impala Terminals Huelva SL.

With the completion of the first phase of development, the Huelva terminal is set to become the handling, storage and blending hub for metal concentrates in western Europe as well as a strategic gateway for Spain's mining industry, offering 240,000 tonnes of warehouse static capacity and a new 550-metre private berth.

In Brazil, the Porto Sudeste iron ore terminal which Impala owns jointly with Mubadala built up operations after completing the transition from the construction phase and commissioning all equipment. Despite the weak price environment we succeeded in sourcing volumes by working closely with Trafigura. The port was also able to add value by blending different ore qualities to complement the trade margin. It exported 7 million tonnes in 2016 and expected to reach 8 million tonnes during the calendar year. This remained significantly below installed capacity of 50 million tonnes at the port owing to the weak global iron ore market, and so Trafigura took an impairment on the value of the asset amounting to USD250 million. This reflected Trafigura Group's generally fair approach to valuation of its assets.

Meanwhile our barging operation on the Parana River, linking Trafigura's new oil storage terminal at Campana, Argentina, with upstream ports in Paraguay and Bolivia, continued to build its activities, transporting diesel and gasoline to product-short markets to the north and carrying agricultural products on the return leg. The Parana fleet has now doubled in size to 27 barges and four pushers. We continue to look for opportunities for further expansion along the river.

LOOKING AHEAD

As we move into 2017, we expect commodity markets to remain weak, placing continued pressure on margins and an ongoing premium in optimising the efficiency and cost effectiveness of our operations. We will focus on continuing to optimise our Colombian operations, building further flows through Porto Sudeste and in general consolidating our expertise in operations, maintenance and health, safety, environment (HSE) management. We are also looking to roll out a multi-product warehouse management system in our larger facilities to drive process unification and procedure that should create further efficiencies.

For further information please visit **www.impalaterminals.com**

MINING GROUP

NICOLAS TREAND
Global Head of
Mining Operations

Trafigura's Mining Group manages mining operations, develops projects, conducts technical audits of potential partner projects and provides advisory and support services to the rest of the Group – both to generate profit and to secure access to commodities produced via long-term offtake or marketing agreements.

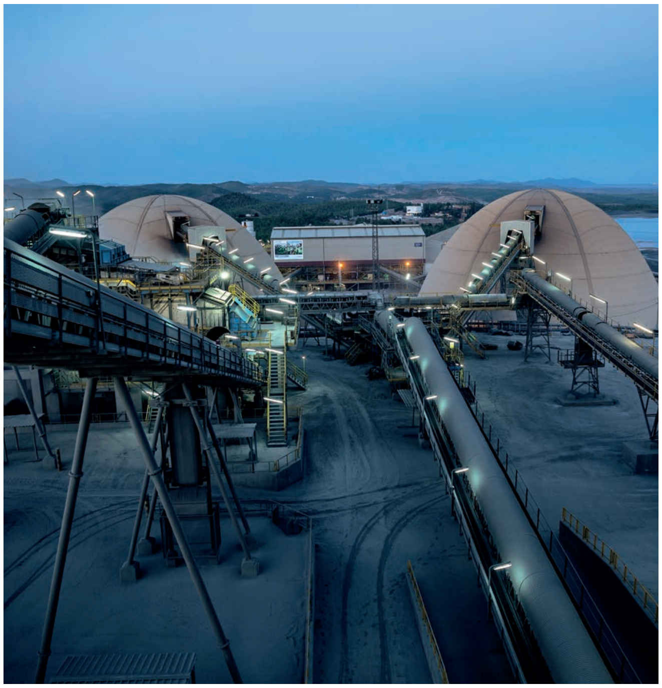
HIGHLIGHTS

- Investment programme to boost efficiency and improve safety management in MATSA, Spain.
- Construction commences on Castellanos lead and zinc mine in Cuba.

Trafigura's Mining Group oversees mining operations in Europe, Latin America, Africa and Asia.

4.4mmt
Ore extracted at MATSA mine, Spain (2015: 3.6mmt)

0.7mmt
Ore extracted at Catalina Huanca (2015: 0.7mmt)



MATSA mine near Seville, Spain.

For the Mining Group, 2016 was a year of consolidation and investment. The two key themes were weak metal markets as a result of surplus supplies, and a focus on investing to upgrade and execute existing projects. Our key assets remain the Minas de Aguas Teñidas (MATSA) mining complex in southern Spain, a 50-50 joint venture with Mubadala, and the wholly owned Catalina Huanca mine in Peru. MATSA underwent a significant management overhaul following the change in ownership, including an investment programme to boost efficiency and improvements in safety management. During the year we also started work on a significant new mining project in Cuba and continued to explore opportunities in Brazil.

MANAGEMENT CHANGE AND COST CONTROL IN SPAIN AND PERU

The restructuring of ownership at MATSA, with the arrival of Abu Dhabi investment company Mubadala as a 50 percent shareholder alongside Trafigura, prompted a comprehensive review of the asset's governance in order to align its objectives and culture with those of both its shareholders. We appointed a new General Manager in Audra Walsh, an experienced mining professional with a strong track record with mining majors, and otherwise refreshed the management team to sharpen the focus on cost control and safety management. The cultural challenge came on top of an economic one, with the fall in copper prices creating a fresh need for cost efficiencies. MATSA's answer to the latter was the Avanza project, an efficiency programme which improved the operation's EBITDA by USD21 million on a full-year basis. By year-end the restructuring was complete and a new basis had been created for future growth.

Our Catalina Huanca lead and zinc mine in Peru also faced a cost challenge as a result of low commodity prices. We reduced headcount at the mine and launched a number of small investment programmes to improve efficiency, notably including the installation of a filter press to reduce the volume of water in tailings from the mine and thus control waste transport costs. Catalina Huanca is now in good shape to weather the continuing weakness in commodity prices and to benefit from the expected upturn in the zinc market.

Mineração Morro do Ipê mine in Minas Gerais region, Brazil.

OPPORTUNITIES IN CUBA AND BRAZIL

Despite the pressure on mining assets, we continued to invest in cash-generating projects for the future. In particular construction started on the Castellanos lead and zinc mine in Cuba. This is a project between Trafigura and the Cuban government and already amounts to the largest industrial investment on the island. Given the additional nearby concessions we own, this has the potential to become a significant part of our mining portfolio and of the Cuban export economy. The project is another illustration of Trafigura Mining Group's ability to put its expertise and investment to work in challenging economic or political environments. Work is so far proceeding to plan, and the mine is expected to start production towards the end of 2017.

PRIORITIES FOR THE COMING YEAR

We already have a full programme of work for 2017 balancing the need for cost control in light of weak markets with the imperative to invest for the future. Developments include:

- Rolling-out the new safety system developed for MATSA across all our assets;
- Extending the life of existing assets through selective exploration projects;
- Adjusting mining plans of existing polymetallic assets to maximise value and increase productivity.

For further information please visit **www.trafigura.com/mining-group/**

GALENA ASSET MANAGEMENT

GALENA asset management

Galena Asset Management, Trafigura's wholly owned investment subsidiary, executed a fundamental change of strategy during 2016, shifting focus from derivatives trading and trade finance to private equity-style investment in real assets.

In December 2015, the decision was taken to wind down the Galena Metals Fund and to review strategic options for the Galena Trade Finance Fund. After year-end it was announced that the Singapore-based independent asset manager EFA Group would take over as investment manager of the trade finance fund.

This left the Galena Private Equity Resources Fund as Galena's sole focus. The Resources Fund has raised USD400 million to invest in the equity and debt of metals and mining companies. To date it has invested USD200 million in a number of assets in the Democratic Republic of the Congo and the US, and it made no new transactions in 2016. Instead it worked to recapitalise and restructure existing investments in light of low commodity prices.

At Mawson West, a Toronto-listed resource company in which the Fund held a majority stake, a decision was made in March 2016 to place the Kapulo mine in DRC, its sole operating asset, on care and maintenance. The Fund subsequently moved to take Mawson West private. Another Fund asset, its investment in Bowie Resource Partners, which operates coal mining assets in the US, required additional financing later in the year. On 30 September 2016, the Fund took majority ownership and control of Bowie, replacing the CEO with a new Interim CEO.

Looking forward, Galena continues to prospect for suitable resource investments offering strong underlying asset value and the opportunity to apply management and financial capabilities from the wider Trafigura Group. However, the continuing flood of cheap liquidity in global debt and equity markets at the low end of the commodity cycle has incentivised owners to secure additional debt rather than selling. The transactions that have occurred have closed with valuations inflated by the strong competition and making the projected investment returns sub-optimal.

For further information please visit **www.galena-invest.com**

HOW TRAFIGURA MANAGES RISK

Trafigura operates in dynamic markets that pose a wide range of risks, whether financial, political, operational or environmental. In consequence, a rigorous and conservative approach to risk management is an integral element of Trafigura's business and has been a central focus of the Group since its foundation.

As a rule, the Group actively manages and mitigates wherever possible the identifiable or foreseeable risks inherent to its activity – for example in systematically hedging exposure to flat prices and in extensively using insurance and financial tools such as letters of credit.

It has also ensured a degree of diversification in its business – trading a wide range of commodities with diverse and uncorrelated market dynamics in various geographical regions – that in itself reduces the Group's exposure to risk. Unlike many financial assets, physical commodity markets provide many opportunities for risk diversification. The premium paid for copper in China, for example, has little to do with the pricing relationship in LPG between the US and Europe.

Diversification results in lower overall exposure and higher risk-adjusted performance. As we extend our trading capabilities, we are diversifying the business further.

TRAFIGURA'S RISK MANAGEMENT SYSTEM

To manage the full range of risks to which it is exposed, the Group has developed a system with multiple lines of defence.

The first line consists of managers of the trading divisions and operating companies, overseen directly by the executive members of the Board of Directors.

Trafigura has a flat corporate governance structure featuring short and direct channels of communication and control (see separate section on Governance on page 40).

The Board of Directors has principal oversight responsibility, sets the risk management framework, determines the overall risk appetite of the business, and ensures that the appropriate structures and processes are in place to handle each category of risks in an appropriate manner.

The second line consists of a series of corporate functions that establish policies and processes for managing different categories of risk, as well as providing analysis, advice and implementation support.

MARKET AND PRICE RISK

Risk Committee and Chief Risk Officer

Trafigura systematically hedges all index price exposure incurred as a result of its trading activities within a framework set by the Board of Directors and implemented by the Risk Committee and the Chief Risk Officer (CRO).

The CRO reports directly to the Chief Operating Officer and the Board of Directors. The CRO is a key member of the Risk Committee, which includes company directors and senior traders. The Committee meets at least weekly to manage overall exposures, assess the impact of changing market dynamics and limit risk exposures and concentrations.

Trafigura's ongoing programme of investment in risk management systems includes a reporting system which automatically notifies the risk management and trading teams whenever a book nears its risk limits.

The CRO works proactively with trading teams to analyse changing market conditions and ensure that hedging strategies are focused on current market dynamics. Rigorous methodologies for managing market risk are used across the company. The CRO's risk team employs advanced statistical models that capture the non-normal dynamics which are an important feature of commodity markets.

The risk team focuses on aggregate risk, paying particular attention to term-structure and intra-commodity spreads. Risk concentrations are continuously reviewed in the context of changing market dynamics. The CRO manages strategic hedging activity dynamically to reduce risk concentrations and limit company-wide exposure.

FINANCE AND CREDIT RISKS

Finance Committee and Finance Department

The Finance Department supports the activities of the whole Group and is involved at the earliest stage of transactions and projects. Overseen by the Finance Committee, it is responsible for assessment of financial risk and has the capacity to veto any transaction. Within Finance, the Credit Department's key role is to safeguard the balance sheet. It performs fundamental credit analysis, assessing credit risk associated with the Group's counterparts, setting internal limits, monitoring exposures and overseeing documentation.

COMPLIANCE RISKS

Compliance Committee and Head of Compliance

Trafigura's Global Head of Compliance oversees the implementation and further development of our Code of Business Conduct, reporting to the COO and to the Trafigura Compliance Committee. The Compliance Department focuses on financial and commercial compliance, incorporating KYC, anti-money laundering, trade sanctions and anti-bribery and corruption. The Compliance Committee is chaired by Trafigura's CEO and meets at least twice a year.

RISKS PERTAINING TO HEALTH, SAFETY, ENVIRONMENT AND COMMUNITIES

HSEC Steering Group and Corporate Affairs

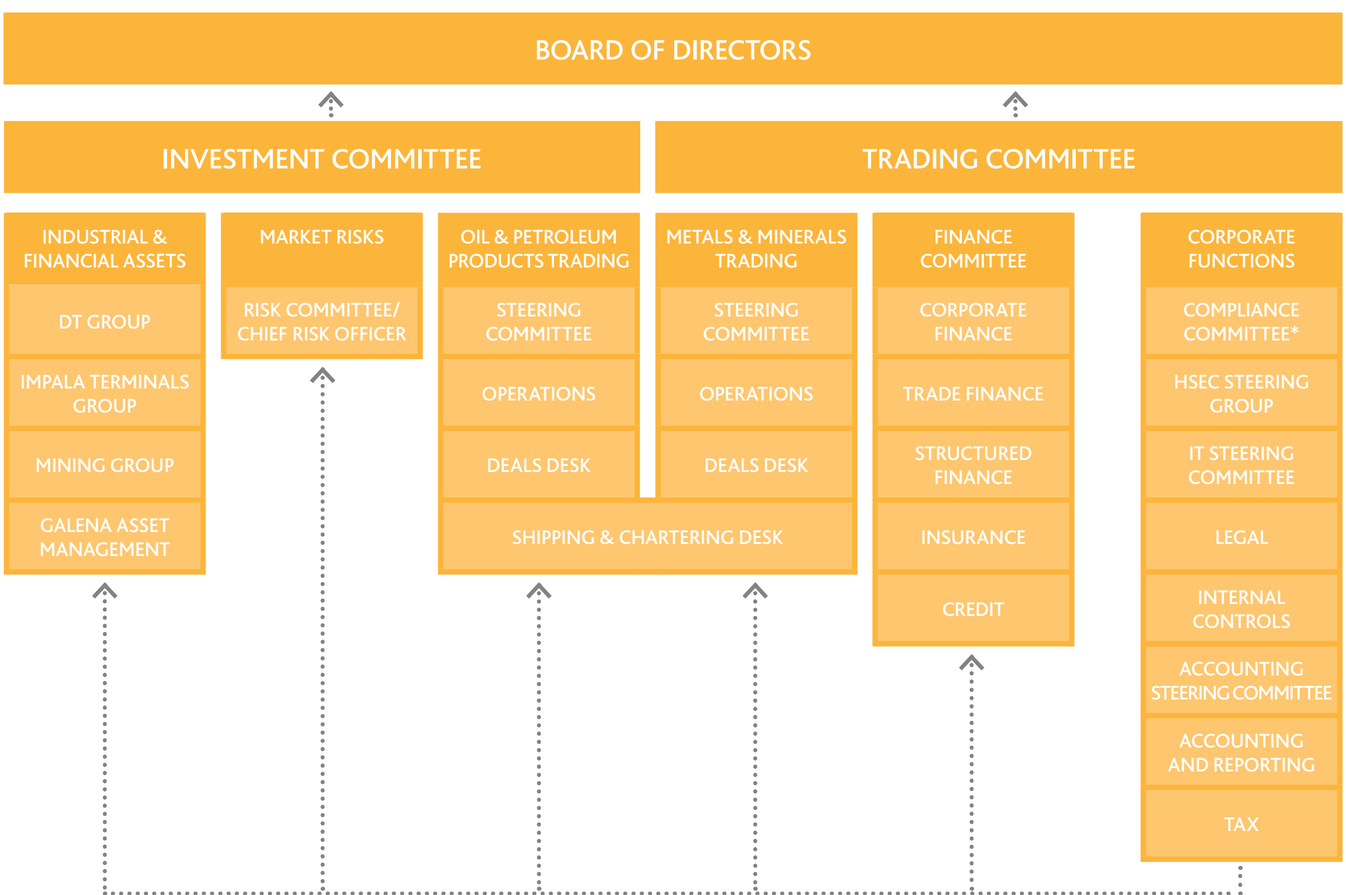
This committee is chaired by a member of the Board of Directors and the Head of Corporate Affairs and includes Trafigura's CEO and senior representatives from across the Group. It is mandated by the Board to promote best practice, oversee the management of HSEC risks and ensure that Trafigura's Corporate Responsibility Policy and Business Principles are implemented consistently across the organisation.

CONTROL RISKS

Internal Controls Team

The Internal Controls team supports management across the Group in annually assessing risks and controls for the governance, trading, IT and support processes. Results of these activities are reported to the Board of Directors accompanied by action plans to strengthen controls and further mitigate risks where required. Internal Controls manage these annual framework cycle activities and external auditors validate the existence of the Trafigura Internal Control System every year. Additionally the team performs site reviews to assess how local management manages risk and to identify opportunities for improvement, and advises on process design for new IT applications.

OVERVIEW OF TRAFIGURA'S RISK MANAGEMENT SYSTEM



* The Trafigura Group Pte. Ltd. Compliance Committee is chaired by our CEO. The Global Head of Compliance chairs the Compliance Committees of all Group companies.

KEY RISK	MITIGATION AND ACTIONS	
MARKETS AND PRICES • Volatility in commodity prices, spreads, interest and exchange rates. • Fluctuations in the supply of, or demand for, commodities which we trade.	• It is a fundamental objective of Trafigura's business model to be able to operate successfully in all market conditions. The Group's policy is to hedge all index price exposure related to physical transactions on a deal-by-deal basis. • As a matter of policy, 100 percent of stock is at all times either pre-sold or the index price is hedged. • Despite such hedging Trafigura remains exposed to basis risk, ie the risk of changes in the difference between the price of the commodity being hedged and the hedging instrument. The group carefully monitors all its hedging positions on a daily basis in order to avoid excessive basis risk resulting from these imperfect correlations.	• In terms of exchange rate risks, the majority of sales and purchases are denominated in US dollars. Exposure to other currencies is hedged and financing raised in currencies other than the USD is immediately swapped into dollars. • Concerning interest rate risks, our policy is to borrow short-term working capital at floating rates, with any rate changes passed through to our customers, and to fix rates for medium- and long-term financing via the swaps market. • Freight costs are hedged by our Shipping and Chartering Desk via Forward Freight Agreements (FFAs) and bunker costs. *For our view of the market environment and how we are responding, please see CEO report (p04).*
FINANCE AND LIQUIDITY	• Trafigura relies on a deep pool of financing from banks for working capital to support its business, consisting of three pillars: trade finance, securitisation and unsecured committed revolving credit facilities. *See CFO statement (p10 – p15).* • For longer-term capital needs we raise funds from time to time on public bond markets or through private placements with investment institutions. We follow a strict policy of matching the maturity of our assets and liabilities, with longer-term assets supported by longer-term borrowings.	• We take a conservative approach to managing our funding liquidity, with more than one-third of committed facilities unutilised at all times under normal market conditions, and immediately available cash of around USD500 million always on hand. Our transactional financing base allows the underlying assets to be 100 percent marked-to-market value, matching liquidity needs for any related margin calls. *See CFO statement for a fuller account of our funding model.*
COMPLIANCE AND ETHICS	• Trafigura's Compliance Department oversees Group activities, in partnership with front-office functions, to ensure that we operate with integrity and according to best practice, and that our controls are relevant, rigorous and robust. It focuses on promoting a sound compliance culture across the organisation, in which everyone recognises their personal responsibility for meeting our compliance objectives. The team adopts a risk-based approach, allocating energy and resources to the issues that matter most to our core business and our stakeholders.	• The Department's activities include counter party due diligence (KYC); anti-money-laundering; sanctions and trade restrictions; anti-bribery and corruption; gifts, hospitality and entertainment; political contributions; protection of whistle-blowers; financial compliance and market conduct. *See 2016 Responsibility Report (p54-p57).*
ECONOMIC AND FINANCIAL SANCTIONS	• The Group takes its compliance obligations with regard to international sanctions extremely seriously. Ensuring this position is respected in all our business activities, and that we fulfil the undertakings on sanctions that we give as part of our credit facilities, is a key focus for the trading desks with support from the Compliance, Legal and Finance departments.	*See 2016 Responsibility Report (p54-p57)*

KEY RISK	MITIGATION AND ACTIONS	
COUNTERPARTY, COUNTRY AND CREDIT RISK	• On counterparty and credit risk, Trafigura uses internal credit limits established by the Credit department. • Trafigura lays off political risk in relation to countries below a certain risk rating as gauged by Dun & Bradstreet, by purchasing political risk insurance. • Credit limits reflect Trafigura's own appetite for risk and are based on a credit analysis of the client as well as the size of the relevant transaction when compared to Trafigura's balance sheet.	• In light of lower commodity prices in 2015, we paid particular attention to screening our portfolio of prepayment agreements with producers for credit risk. • Exposures in excess of a credit limit are covered through the insurance or bank markets. • The Group prides itself on having had an extremely low incidence of credit losses throughout its history.
DIGITAL INFRASTRUCTURE/ CYBER-SECURITY	• The company takes IT security extremely seriously and is investing significant sums in state-of-the-art systems to protect the integrity of its IT architecture and processes against the threat of fraud or other potential damage from cyber-attack.	
LEGAL, TAXATION AND REGULATION • Changes in taxation arrangements in various territories. • Collateral effects of changes in financial regulatory framework.	• Trafigura is increasingly focused on maintaining legal, taxation and regulatory risks, given the multiple jurisdictions in which it operates and its global scope. Trafigura adheres to applicable local and international tax law in the countries where it operates, including legislation on transfer pricing. We are following the unfolding discussions on Base Erosion and Profit Shifting (BEPS) within the Organisation for Economic Co-operation and Development, and will adapt our reporting to respond as and when this produces more concrete recommendations.	• We are also following closely the discussions about potential new forms of regulation that may be imposed on commodities trading firms, for example under the European Union's MiFid 2 legislation. We have made representations to the appropriate authorities about the risks and unnecessary costs of introducing position limits in commodity derivatives markets and of imposing regulatory capital requirements on commodity trading firms.
CORPORATE RESPONSIBILITY • Eliminating fatalities and reducing lost-time injuries. • Improving Group management of risks posed by Heavy Goods Vehicles (HGVs). • Improving Trafigura's management of contractors. • Enhancing engagement with notable international organisations in the sphere of corporate responsibility.	• Our Corporate Responsibility Policy and Business Principles articulate the leadership team's priorities and commitments for social and environmental governance. At the operational level, they outline what is expected from everyone in the Group, its divisions and operating companies. Each division and operating company is required to supplement the Policy and Principles with relevant, sector-specific standards and procedures to manage the impacts of their operations. • The HSEC Steering Committee requires all divisions and operating companies to maintain a material risk register describing the key issues they need to manage and mitigate.	• All HSEC incidents are recorded and categorised for severity on Safeguard, the Group's HSEC data management system. Incidents registered as levels 3, 4 or 5, involving significant spills or single or multiple fatalities, as well as high-potential near misses are investigated and the results and remedial actions are presented to the Steering Committee. • We engage actively with leading industry forums, including the UN Global Compact, the EITI and the World Business Council for Sustainable Development (WBCSD). *See Trafigura's 2016 Responsibility Report for further information on these activities. www.trafigura.com/responsibility.*

FINANCE TO MEET DIVERSE BUSINESS NEEDS

CONTINUING ACCESS TO CAPITAL

Trafigura's activities require substantial amounts of capital. We source, store, blend and deliver commodities around the globe. We invest in terminals, logistics and physical infrastructure to improve the efficiency of our trading operations.

Our diversified funding model allows us to continue to operate effectively and successfully in all market conditions. Its scalability and structure protects the business from market shocks and provides flexibility and the ability to capitalise on opportunities as they arise.

We have put a global programme of flexible, short-term facilities in place to finance our day-to-day operations and a programme of longer-term, corporate facilities to finance our asset acquisition and other corporate requirements. Available funding exceeds our everyday requirements. This provides headroom for unusual market conditions. We also maintain substantial cash balances to ensure we will always meet day-to-day capital commitments, even in unexpected circumstances.

OUR APPROACH TO FUNDING

DIVERSIFICATION IMPROVES COMPETITIVENESS AND ACCESS TO CAPITAL

We diversify both the sources and the structure of our financing to minimise risk and maximise operational effectiveness.

We raise funds in a variety of markets in the US, Europe and Asia-Pacific. We have lending arrangements in place with 121 banks around the world. We are therefore not constrained by credit restrictions for specific financial institutions, sectors or regions.

We raise capital with a range of repayment schedules, from very short-term facilities to maturities greater than 10 years. This spreads our exposure across the yield curve.

MATCH-FUNDED, COLLATERALISED LENDING REDUCES CREDIT RISK

As a matter of policy, we match the type of financing to the business requirement. We have established a three-pillar funding structure to put this into practice.

We use short-term financing for trading. These loans are secured against the underlying physical commodities. Lines are marked-to-market each week so the level of financing tracks the value of the underlying collateral as prices change. We raise longer-term debt to finance fixed assets and investments.

HOW OUR FUNDING MODEL WORKS IN PRACTICE

KEY:

The chart on the right illustrates the interaction between the three different types of financing Trafigura uses during the life of an example trade.

EXAMPLE CRUDE OIL TRANSACTION:

Trafigura agrees today:

(1) To buy one million barrels of crude from an oil major loading in 41-45 days @ Brent-$1/bbl. The Brent price is fixed as the average during the loading period.

(2) To sell one million barrels of crude to a refinery for delivery in 101-105 days @ Dubai+$4/bbl. The Dubai price is fixed as the average during the loading period.

- **Revolving line:** Cash flows arising from hedging activity and freight costs.
- **Transactional line:** Cash flows arising from the physical transaction and its financing by the LC issuing bank.
- **Securitisation line:** Cash flows between Trafigura and its separately capitalised special purpose vehicle (SPV).
- ↑ Cash inflow
- ↓ Cash outflow
- ↕ Market-contingent cash flow

TRANSACTION COMPONENT	DAY 1: TRADE AGREEMENT	DAYS 2 – 40: PRICING PERIOD
	Brent contract = $50 Dubai contract = $49	Oil major issues invoice to Trafigura
PHYSICAL TRADE	Trafigura agrees: (1) To buy crude, (2) To sell crude (see key for trade details)	
FINANCE PHYSICAL BUY LEG BY ISSUING LETTER OF CREDIT (LC)		Bank issues LC, drawable on loading date
HEDGE BUY LEG WITH BRENT FUTURES	↓ Buy 1,000 Brent futures @50 -$2m (initial margin)	↕ Mark-to-market daily (variation margin)
HEDGE SALES LEG WITH DUBAI FUTURES	↓ Sell 1,000 Dubai futures @49 -$2m (initial margin)	↕ Mark-to-market daily (variation margin)
FREIGHT COST		
PHYSICAL SALES LEG		
NET CASH FLOW	Initial margin: -$4m	

Our funding strategy matches sources of funding to financing requirements. We have developed diverse financing strategies that maximise scalability, flexibility and business resilience.

TRAFIGURA FUNDING MODEL

CASH ON HAND

HEADROOM

TRANSACTIONAL FACILITIES | SECURITISATION PROGRAMME | CORPORATE CREDIT FACILITIES

TRANSPARENCY PROMOTES STABILITY

As a private company relying on debt to finance its operations, Trafigura's performance is closely scrutinised by a large group of banks worldwide. We comply with the financial covenants attached to our syndicated bank facilities. Members of the finance team regularly meet our banks. These meetings often include operationally focused personnel (from Credit, Compliance and Trading Desks) who provide additional insight into our business model. As an issuer of publicly listed debt, we also meet the transparency requirements of our bond investors. Our interim and full-year reports are published online. We hold regular calls and presentations to update investors and respond to specific queries directly.

OUR THREE-PILLAR FUNDING STRUCTURE

1. TRANSACTIONAL FACILITIES

All transaction-based lending is fully collateralised. We fund day-to-day trading through one-to-one (ie, bilateral) agreements with individual banks. For most transactions, this starts with a bank issuing an LC on behalf of the buyer in favour of the seller. The physical commodity being financed by the LC is specified as security. On delivery, the seller of the commodity draws down the LC, which then converts into a secured loan from the LC-issuing bank. The loan is marked-to-market at least weekly until maturity so that the amount being financed always corresponds to the value of the underlying commodity. This secured loan is repaid by the cash flow from the on-sale of the commodity from Trafigura to the end-buyer, with a receivable created once the sale has been agreed. This receivable is either repaid when the counterparty pays Trafigura according to the credit terms of the transaction or from the securitisation programme if the receivable is sold into the programme.

2. SECURITISATION PROGRAMME

Trafigura manages a securitisation programme through a separately capitalised SPV. The programme further diversifies Trafigura's funding sources and, thanks to its investment-grade ratings from Moody's and S&P, is a cost-effective financing mechanism. Most trades are financed on a trade-by-trade basis with bilateral trade finance loans, but Trafigura can fund eligible receivables once an invoice has been issued by selling them to the SPV. Securitising our receivables accelerates the rotation of existing credit lines, since secured bilateral loans can be repaid faster with the programme proceeds.

3. CORPORATE CREDIT FACILITIES

Trafigura invests in fixed assets to support our trading activity. We finance these with long-term debt adhering to our policy of matching assets with liabilities. We issue securities and negotiate lending facilities in diverse markets. Funding sources include eurobonds, perpetuals, revolving credit facilities, private placements and term loans.

PUBLIC RATINGS

Trafigura does not hold a public rating and does not seek to obtain one. The Group focuses on strengthening its balance sheet through long-term value creation.

We obtain our funding from stakeholders who understand our business model in detail and whose investment decisions are not driven by ratings. We have significantly expanded our sources of financing over the years by maintaining a sustainable credit standing that is consistent with an investment-grade profile.

Likewise, the absence of a rating means that Trafigura's business and investment decisions are not taken on the basis of maintaining a particular rating level, something which becomes particularly important at times of high-market volatility.

DAYS 41 – 45: LOADING

Average Brent contract = $52
Average Dubai contract = $50

- Buy 1m bbls @ Brent-$1
  Counterparty draws on LC
  -$51m
- Drawdown amount moves onto balance sheet as secured loan:
  +$51m
- Sell 1,000 Brent futures @52
  +$2m (initial margin)
  (realised p/l = +$2m)
- Buy 1,000 Dubai futures @50
  +$2m (initial margin)
  (realised p/l = -$1m)
- Charter tanker for 65 days @ $3.50/bbl
  -$3.5m

• Return of initial margin: +$4m
• Realised profit on futures: +$1m
• Transportation costs: -$3.5m
Total: +$1.5m

DAYS 46 – 100: TRANSPORTATION

- Loan marked-to-market
  (physical excess/deficit)

DAYS 101 – 105: DELIVERY

Trafigura issues invoice to refinery.
Invoice is securitised with SPV as beneficiary.

- Sell 1m bbls @ Dubai +$4
  (transaction value = $54m)
- Securitisation programme refinances loan
  -$51m (principal)
  -$85,000 (1% interest) for 60 days
- Securitisation vehicle receives payment for cargo from refinery
  +$54m on 30 days payment terms

• Proceeds from physical sale: +$54m
• Repayment of loan principal: -$51m
• Payment of loan interest: -$85,000
Total: +$2.92m

NET RESULT
$415,000 PROFIT

BOARD OF DIRECTORS AND COMMITTEES

Trafigura is exclusively owned by its management and active employees, who are therefore focused on the long-term success of the business, promoting management depth and stability, and encouraging prudent risk management.

The reference parent company of the Group is Trafigura Group Pte. Ltd. (TGPL), incorporated in Singapore. All Group activities and assets globally are consolidated under TGPL, which is also the entity for all Group corporate reporting.

BOARD OF DIRECTORS

The principal oversight body for the Group is the Board of Directors, a unitary structure established in accordance with Singapore law. The Board of Directors has overall responsibility for the strategic direction and management of the Group across all its investments and activities. It is responsible for oversight of the Group, shareholder relations and commercial and financing strategy. Members of the Board of Directors are listed on the opposite page. Formal meetings of the Board of Directors take place in Singapore at a minimum of four times a year.

In practice, those Directors with executive responsibilities are in constant touch with each other, and are actively involved in a range of management steering committees, as outlined here. Management of the Group is characterised by short reporting lines, flat structures, clear delineation and segregation of responsibilities, and personal accountability.

Employee remuneration at all levels is linked to Group performance as well as individual contribution. As shareholders, senior traders and front- and back-office personnel have a personal stake in the business and are therefore invested in its long-term success.

MANAGEMENT STEERING COMMITTEES

Under the Board of Directors, a number of management steering committees coordinate the day-to-day management of Trafigura.

During 2016, two new management committees were established to oversee the trading business on the one hand and investments on the other. The Trading Committee is responsible for managing the trading activities of Trafigura within the financial and operating parameters set by the Board.

The Investment Committee is responsible for defining and implementing an investment strategy and risk framework for the Group and its subsidiaries. The work of these committees has already enhanced our management process. In addition the following steering committees continue to provide vital support:

- Finance Committee
- Accounting Committee
- IT Steering Committee
- Market Risk Management Committee
- Compliance Committee
- HSEC Committee
- HR Group

Left to right: Christopher Cox, Pierre Lorinet, Andrew Vickerman, José Larocca, Jeremy Weir, Mike Wainwright, Sipko Schat, Mark Irwin.

BOARD OF DIRECTORS

JEREMY WEIR

CHIEF EXECUTIVE OFFICER

Jeremy Weir was appointed CEO of Trafigura in March 2014, after a career spanning nearly three decades in commodity and commodity derivative markets. An Australian national, he joined the Trafigura Group in 2001 as head of metals derivatives, structured products and risk management. Immediately prior to his current appointment he served as a Management Board Director, Head of Risk and CEO of Galena Asset Management and Trafigura Mining Group. Before Trafigura, Jeremy spent nearly nine years between 1992 and 2000 with N M Rothschild. Jeremy holds a BSc (Hons), Geology Major from the University of Melbourne.

MIKE WAINWRIGHT

CHIEF OPERATING OFFICER

Mike Wainwright was appointed Chief Operating Officer and Trafigura Management Board member in January 2008. His principal focus is the management of the middle and back office support teams for the trading division in addition to direct responsibility for the Group's profit and loss. Mike joined Trafigura in 1996 as an accounts assistant in the Oil Division. He has held various roles within the Group, covering accounting, deals desk and middle-office IT development. A UK national, Mike holds a BSc in Mathematics and Actuarial Studies from Southampton University.

JOSÉ LAROCCA

HEAD OF OIL TRADING

José Larocca was appointed to the Trafigura Management Board and Head of the Oil and Petroleum Products Trading Division in March 2007. He was one of the company's earliest employees, joining Trafigura in London in 1994 on the Oil Deals Desk before taking a series of commercial roles, including as a trader of naphtha and gasoline. Prior to joining Trafigura, José worked for two years at Interpetrol, a small oil trading company in Buenos Aires. An Argentine national born in Switzerland, he holds a diploma in International Trading from the Bank Boston Foundation (Buenos Aires).

PIERRE LORINET

Pierre Lorinet was Chief Financial Officer of Trafigura from 2007 until 2015. Following his departure from the role of CFO in September 2015, Pierre joined the Board Directors of Trafigura Group Pte. Ltd. and was nominated on to the Board of Directors of Puma Energy. He joined Trafigura in 2002 as Co-head of Structured and Corporate Finance. In 2012, Pierre relocated to Singapore to take over management of the Asia-Pacific region in addition to his CFO duties. Prior to joining Trafigura, Pierre worked for Merrill Lynch in London in the areas of structuring of asset-backed securities and of debt origination. He started his career in commodity finance at Banque Indosuez in Bahrain. A French national, he holds a Master's degree in Business from ESCP Europe in Paris and an MSc in Finance from Lancaster University.

SIPKO SCHAT

Sipko Schat joined the Board of Directors in January 2016. A Dutch citizen, Sipko worked in the Rabobank Group for over 25 years, where he was a member of the Executive Board of Rabobank Nederland. He was also responsible for the Wholesale Clients division of Rabobank International and managed the Wholesale Management Team. Sipko is a Non-Executive Director of various companies including an independent member of the Supervisory Board and Chairman of the Risk Committee for Rothschild & Co (formerly Paris Orléans); Chairman of the Supervisory Board of Vion N.V., an international food company; and a senior independent Director of OCI N.V., a global producer of natural gas-based fertilizers and industrial chemicals. Sipko holds a Master of Laws degree from the University of Groningen, the Netherlands.

MARK IRWIN

Mark Irwin is a UK-qualified chartered accountant who joined Trafigura as financial controller in 1994 and was appointed as a director in 2004 to provide support for Trafigura's corporate and IT infrastructure. Mark holds a degree in Computer Science and Accounting from the University of Manchester.

CHRISTOPHER COX

Christopher Cox was formerly the Head of the Metals and Minerals Trading Division at Trafigura and a member of the Management Board between March 2004 and December 2011. A qualified geologist, his experience in global investment and trading relationships greatly enhances Trafigura's ability to continue its expansion in sub-Saharan Africa and further afield. Chris was educated in South Africa and holds a BSc (Hons) in Geology and an MBA from the University of Cape Town Graduate School of Business.

ANDREW VICKERMAN

Andrew Vickerman spent almost 20 years with Rio Tinto, one of the world's leading mining companies, the last 10 as a member of the Executive Committee with responsibility for Global Communications and External Relations. An economist by background, with a PhD in economics from Cambridge University, he has previously worked for The World Bank and other international agencies.

Mariano Marcondes Ferraz served on the TGPL Board of Directors throughout 2016, and as a director of a number of other Group companies as well as Puma Energy Holdings Pte Ltd. On 9 November 2016 he informed the Group that he had resigned from his directorships with immediate effect and would no longer be active in these businesses.

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INDEPENDENT AUDITOR'S REPORT

To: the Shareholders and the Board of Directors of Trafigura Group Pte. Ltd.

REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

We have audited the accompanying consolidated financial statements for the year ended 30 September 2016 of Trafigura Group Pte. Ltd., Singapore, which comprise the consolidated statement of financial position as at 30 September 2016, the consolidated statements of income, other comprehensive income, changes in equity and cash flows for the year then ended and notes comprising a summary of the significant accounting policies and other explanatory information.

MANAGEMENT'S RESPONSIBILITY

Management is responsible for the preparation and fair presentation of the consolidated financial statements and for the preparation of the report of the Board of Directors, both in accordance with International Financial Reporting Standards as issued by the IASB. Furthermore, management is responsible for such internal control as it determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. This requires that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

OPINION WITH RESPECT TO THE CONSOLIDATED FINANCIAL STATEMENTS

In our opinion, the consolidated financial statements give a true and fair view of the financial position of Trafigura Group Pte. Ltd. as at 30 September 2016, its result and its cash flows for the year then ended in accordance with International Financial Reporting Standards as issued by the IASB.

Amsterdam, 2 December 2016
Ernst & Young Accountants LLP
Signed by W.J. Smit

A. CONSOLIDATED STATEMENT OF INCOME

	Note	2016 USD'M	2015 USD'M
Revenue	7	**98,097.8**	97,236.5
Cost of sales		**(95,806.6)**	(94,636.1)
Gross profit	4	**2,291.2**	2,600.4
Other income/(expenses)	8	**(233.2)**	(198.4)
General and administrative expenses	9	**(946.7)**	(994.8)
Results from operating activities		**1,111.3**	1,407.2
Finance income		**387.0**	228.5
Finance expense		**(507.7)**	(479.0)
Net financing costs		**(120.7)**	(250.5)
Share of profit/(loss) of equity-accounted investees	13	**94.3**	87.8
Profit before tax		**1,084.9**	1,244.5
Income tax expense	10	**(110.2)**	(141.1)
Profit for the year		**974.7**	1,103.4
Profit attributable to			
Owners of the Company		**750.8**	1,235.9
Non-controlling interests	22	**223.9**	(132.5)
Profit for the year		**974.7**	1,103.4

See accompanying notes

B. CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME

	Note	2016 USD'M	2015 USD'M
Profit for the year		**974.7**	1,103.4
Other comprehensive income			
Items that are or may be reclassified to profit or loss:			
Gain/(loss) on cash flow hedges	21	**45.1**	(69.9)
Tax on comprehensive income	10	**(3.3)**	5.2
Exchange loss on translation of foreign operations		**(70.0)**	(83.0)
Share of other comprehensive income from associates (exchange loss on translation of foreign operations)		**(45.4)**	(240.6)
Items that will not be reclassified to profit or loss:			
Net change in fair value of financial assets at fair value through OCI	16	**(31.7)**	(91.9)
Other comprehensive income for the year net of tax		**(105.3)**	(480.2)
Total comprehensive income for the year		**869.4**	623.2
Total comprehensive income attributable to			
Owners of the Company		**631.1**	766.9
Non-controlling interests		**238.3**	(143.7)
Total comprehensive income for the year		**869.4**	623.2

See accompanying notes

C. CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Note	30 September 2016	30 September 2015
		USD'M	USD'M
Assets			
Property, plant and equipment	11	**2,345.0**	2,400.3
Intangible assets	12	**230.5**	245.8
Equity-accounted investees	13	**3,464.4**	3,167.5
Prepayments	14	**945.3**	1,067.2
Loans receivable	15	**801.3**	440.1
Other investments	16	**540.3**	809.2
Derivatives	27	**97.3**	57.0
Deferred tax assets	10	**103.8**	169.9
Total non-current assets		**8,527.9**	8,357.0
Inventories	17	**11,537.7**	7,614.4
Trade and other receivables	18	**15,199.9**	13,902.3
Derivatives	27	**476.3**	3,326.2
Prepayments	14	**2,259.8**	2,110.8
Income tax receivable	10	**78.7**	106.5
Deposits	20	**7.9**	46.9
Cash and cash equivalents	20	**3,141.9**	3,534.2
Total current assets		**32,702.2**	30,641.3
Non-current assets classified as held for sale	6	**–**	88.4
Total assets		**41,230.1**	39,086.7
Equity			
Share capital	21	**1,503.7**	1,503.7
Capital securities	21	**646.7**	640.6
Reserves	21	**(558.7)**	(505.9)
Retained earnings	21	**3,956.3**	3,962.5
Equity attributable to the owners of the Company		**5,548.0**	5,600.9
Non-controlling interests	22	**299.1**	56.7
Total group equity		**5,847.1**	5,657.6
Liabilities			
Loans and borrowings	23	**7,234.2**	7,289.7
Derivatives	27	**237.8**	173.3
Provisions	24	**69.3**	83.9
Deferred tax liabilities	10	**189.5**	253.1
Total non-current liabilities		**7,730.8**	7,800.0
Current tax liabilities	10	**245.6**	270.5
Loans and borrowings	23	**18,033.0**	14,668.2
Trade and other payables	25	**8,952.5**	9,486.3
Derivatives	27	**421.1**	1,204.1
Total current liabilities		**27,652.2**	25,629.1
Total group equity and liabilities		**41,230.1**	39,086.7

See accompanying notes

D. CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

		Equity attributable to the owners of the Company										
USD'000	Note	Share capital	Capital contribution reserve	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital Securities	Retained earnings	Profit for the year	Total	Non-controlling interests	Total Group equity
Balance at 1 October 2015		1,503,727	–	(420,828)	(57,313)	(27,765)	640,617	2,726,577	1,235,891	5,600,906	56,734	5,657,640
Profit for the year		–	–	–	–	–	–	–	750,817	750,817	223,926	974,743
Other comprehensive income		–	–	(129,832)	(31,701)	41,822	–	–	–	(119,711)	14,389	(105,322)
Total comprehensive income for the year		–	–	(129,832)	(31,701)	41,822	–	–	750,817	631,106	238,315	869,421
Profit appropriation		–	–	–	–	–	–	1,235,891	(1,235,891)	–	–	–
Dividend	21	–	–	–	–	–	–	(719,059)	–	(719,059)	–	(719,059)
Recycling revaluation reserve to retained earnings FVOCI instruments		–	–	–	65,991	–	–	(65,991)	–	–	–	–
Acquisition of non-controlling interest in subsidiary		–	–	–	–	–	–	–	–	–	4,532	4,532
Share based payments	28	–	–	–	–	–	–	77,656	–	77,656	–	77,656
Subsidiary equity distribution		–	–	–	–	–	–	–	–	–	(502)	(502)
Capital securities (currency translation)		–	–	–	–	–	6,107	(6,107)	–	–	–	–
Capital securities dividend		–	–	–	–	–	–	(48,990)	–	(48,990)	–	(48,990)
Acquisition of subsidiaries from parent	21	–	–	–	–	–	–	6,479	–	6,479	–	6,479
Reclassification		–	–	897	–	–	–	(897)	–	–	–	–
Share of other changes in equity of associates		–	–	–	–	–	–	(33)	–	(33)	–	(33)
Other		–	–	–	–	–	–	(37)	–	(37)	–	(37)
Balance at 30 September 2016		**1,503,727**	**–**	**(549,763)**	**(23,023)**	**14,057**	**646,724**	**3,205,489**	**750,817**	**5,548,028**	**299,079**	**5,847,107**

See accompanying notes

D. CONSOLIDATED STATEMENT OF CHANGES IN EQUITY *(CONTINUED)*

		Equity attributable to the owners of the Company											
USD'000	Note	Share capital	Capital contribution reserve	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital Securities	Retained earnings	Profit for the year	Total	Non-controlling interests	Total group equity
Balance at 1 October 2014		3,215,535	64,053	(109,921)	(17,494)	35,738	–	1,831,467	995,294	6,014,672	301,465	6,316,137
Profit for the year		–	–	–	–	–	–	–	1,235,891	1,235,891	(132,494)	1,103,397
Other comprehensive income		–	–	(313,559)	(91,937)	(63,503)	–	–	–	(468,999)	(11,203)	(480,202)
Total comprehensive income for the year		–	–	(313,559)	(91,937)	(63,503)	–	–	1,235,891	766,892	(143,697)	623,195
Profit appropriation		–	–	–	–	–	–	995,294	(995,294)	–	–	–
Shares issued	21	30,000	–	–	–	–	–	–	–	30,000	–	30,000
Share redemption	21	(1,741,808)	–	–	–	–	–	–	–	(1,741,808)	–	(1,741,808)
Dividend paid		–	–	–	–	–	–	(138,968)	–	(138,968)	–	(138,968)
Transfer due to realisation of FVOCI instruments		–	–	–	52,117	–	–	(52,117)	–	–	–	–
Share based payments		–	–	–	–	–	–	51,129	–	51,129	–	51,129
Subsidiary dividend distribution		–	–	–	–	–	–	–	–	–	(101,184)	(101,184)
Capital securities transferred from parent company	21	–	–	–	–	–	640,617	–	–	640,617	–	640,617
Acquisition of subsidiaries from parent	21	–	(64,053)	–	–	–	–	(23,685)	–	(87,738)	27	(87,711)
Dilution gain from capital contribution in equity-accounted investees		–	–	–	–	–	–	67,715	–	67,715	–	67,715
Reclassification		–	–	2,652	–	–	–	(2,652)	–	–	–	–
Share of other changes in equity of associates		–	–	–	–	–	–	(968)	–	(968)	–	(968)
Other		–	–	–	–	–	–	(637)	–	(637)	–	(514)
Balance at 30 September 2015		**1,503,727**	**–**	**(420,828)**	**(57,314)**	**(27,765)**	**640,617**	**2,726,578**	**1,235,891**	**5,600,906**	**56,734**	**5,657,640**

See accompanying notes

E. CONSOLIDATED STATEMENT OF CASH FLOWS

	Note	2016 USD'M	2015 USD'M
Cash flows from operating activities			
Profit before tax		**1,084.9**	1,244.5
Adjustments for:			
Depreciation	11	**148.4**	167.9
Amortisation of intangible assets	12	**56.3**	51.8
Provisions	24	**(6.7)**	72.4
Gain on fair value through profit and loss instruments	8	**134.2**	(34.8)
Impairment losses on financial fixed assets	8	**39.8**	14.0
Reversal of impairment (no capital) losses on non-financial fixed assets	8	**(243.6)**	–
Impairment losses on non-financial fixed assets	8	**75.1**	407.3
Impairment losses on equity-accounted investees	13	**250.0**	47.9
Net finance costs		**120.7**	250.5
Share of profit of equity-accounted investees	13	**(94.3)**	(87.8)
Gain on sale of non-financial fixed assets	8	**(12.4)**	(11.3)
Loss/(gain) on sale of equity-accounted investees	8	**5.4**	(0.4)
Gain on sale of other investments	8	**(0.1)**	–
Gain on divestments of subsidiaries	8	**(20.3)**	(287.3)
Equity-settled share-based payment transactions	28	**77.7**	51.1
Operating cash flow before working capital changes		**1,615.1**	1,885.8
Changes in:			
Inventories		**(3,925.1)**	188.5
Trade and other receivables and derivatives		**701.3**	1,616.5
Prepayments		**(392.9)**	5.2
Trade and other payables and derivatives		**(562.6)**	(1,507.0)
Cash generated from/(used in) operating activities		**(2,564.2)**	2,189.0
Interest paid		**(544.8)**	(570.2)
Interest received		**376.4**	232.4
Dividends received		**13.2**	25.8
Tax (paid)/received		**(107.7)**	(160.3)
Net cash from/(used in) operating activities		**(2,827.1)**	1,716.7
Cash flows from investing activities			
Acquisition of property, plant and equipment	11	**(668.3)**	(985.1)
Proceeds from sale of property, plant and equipment	11	**514.0**	138.4
Acquisition of intangible assets	12	**(48.9)**	(131.7)
Proceeds from sale of intangible assets		**0.8**	0.3
Acquisition of equity-accounted investees	13	**(543.7)**	(193.3)
Disposal of equity-accounted investees	13	**26.6**	10.3
Acquisition of loans receivable	14/15	**(116.6)**	(804.5)
Disposals of loans receivable	14/15	**31.5**	26.0
Acquisition of other investments	16	**(20.7)**	(282.4)
Disposal of other investments	16	**121.4**	32.3
Disposal of subsidiaries, net of cash disposed of	6	**637.1**	(8.0)
Net cash from/(used in) investing activities		**(66.8)**	(2,197.7)
Cash flows from financing activities			
Dividend/Payment in relation to the share redemption by the direct parent company	21	**(719.1)**	(775.5)
Payment of capital securities dividend	21	**(49.0)**	–
Proceeds from long-term loans and borrowings	23	**100.8**	628.7
Payment of finance lease liabilities	23	**(12.2)**	(12.1)
Increase of short-term bank financing	23	**3,177.7**	606.2
Dividend non-controlling interest	22	**3.4**	(102.2)
Net cash from/(used in) financing activities		**2,501.6**	345.1
Net increase/(decrease) in cash and cash equivalents		**(392.3)**	(135.9)
Cash and cash equivalents at 1 October	20	**3,534.2**	3,670.1
Cash and cash equivalents at 30 September (Note 21)		**3,141.9**	3,534.2

See accompanying notes

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. CORPORATE INFORMATION

The principal business activities of Trafigura Group Pte. Ltd. (the Company) and together with its subsidiaries (the Group) are trading and investing in crude and petroleum products, non-ferrous concentrates, refined metals and bulk commodities such as coal and iron ore. The Group also invests in assets, including through investments in associates, which have strong synergies with its core trading activities. These include storage terminals, service stations, metal warehouses and mines.

The Company is incorporated in Singapore and its principal business office is at 10 Collyer Quay, Ocean Financial Centre, #29-00, Singapore, 049315.

The immediate and ultimate holding companies of the Company are Trafigura Beheer B.V. and Farringford N.V., respectively. Trafigura Beheer B.V. is incorporated in The Netherlands and Farringford N.V. is incorporated in Curacao.

The consolidated financial statements for the year ended 30 September 2016 were authorised for issue by the Board of Directors on 2 December 2016.

2. BASIS OF PREPARATION

The Company's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ('IFRS') as issued by the International Accounting Standards Board ('IASB').

The consolidated financial statements have been prepared under the historical cost convention except for inventories, derivatives and certain other financial instruments that have been measured at fair value. The consolidated financial statements have been prepared on a going concern basis.

a. Functional and presentation currency

The Group's presentation currency is the US dollar (USD) and all values are rounded to the nearest tenth of a million (USD'M 0.1) except when otherwise indicated. The US dollar is the functional currency of most of the Group's principal operating subsidiaries. Most of the markets in which the Group is involved are USD denominated.

3. SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared in compliance with IFRS. The company has consistently applied the accounting policies used in the preparation of its opening IFRS statement of financial position and throughout all periods presented, as if these policies had always been in effect.

a. Basis of consolidation

The consolidated financial statements include the assets, liabilities and results of operations of all subsidiaries and branch offices, which the Company, either directly or indirectly, controls. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee.

Subsidiaries are consolidated from the date on which control is obtained by the Company and cease to be consolidated from the date on which control is transferred to a person or entity outside of the control of the Company. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in the Company's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions with any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received being recognised directly in equity and attributed to equity holders of the Company.

If the Group loses control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. The parent's share of components previously recognised in other comprehensive income (OCI) is reclassified to profit and loss or retained earnings, as would be required if the Group had directly disposed of the related assets or liabilities. Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the Group retains any interest in the previous subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently it is accounted for as an equity-accounted investee or as an equity investment depending on the level of influence retained.

Non-controlling interests in subsidiaries are identified separately from the Company's equity and are initially measured either at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

b. Investments in equity-accounted investees

Associates and joint ventures (together 'Associates') in which the Group exercises significant influence or joint control are accounted for using the equity method. Significant influence is the power to participate in the financial and operating policy decisions of the investee but not control those policies. Joint control is established by contractual agreement and requires unanimous consent for strategic financial and operating decisions. The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

Under the equity method the investment in an Associate is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share in the net assets of the Associate or joint venture since acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment. The statement of income reflects the Group's share of the results of operations of the associate. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity.

Unrealised gains and losses resulting from transactions between the Group and the Associate are eliminated to the extent of the interest in the Associate, unless the sale or contribution of assets constitute a business in which case the gains and losses are recognised in full.

The aggregate of the Group's share of profit or loss of equity-accounted investees is shown on the face of the statement of income and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate or joint venture.

The Group determines at each reporting date whether there is any objective evidence that the investment in the Associate is impaired.

The financial statements of the Associates are prepared for the same reporting period as the Group, unless otherwise indicated.

Changes in the Group's interest in Associates are accounted for as a gain or loss on disposal with any differences between the amount by which the carrying value of the Associate is adjusted and the fair value of the consideration received being recognised directly in the statement of income.

c. Business combinations

The Company accounts for its business combinations under the acquisition method at the acquisition date, which is the date on which control is transferred to the Group. The cost of an acquisition is measured as the aggregate of the consideration transferred measured at acquisition date fair value and the amount of any non-controlling interests in the acquiree. Transaction costs, other than those associated with the issue of debt or equity securities, that the Group incurs in connection with a business combination are expensed as incurred.

If a business combination is achieved in stages, any previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss except when measured at fair value through OCI. It is then considered in the determination of goodwill.

If the consideration transferred for a business combination exceeds the fair values attributable to the Group's share of the identifiable net assets, the difference is treated as goodwill, which is not amortised but is reviewed annually for impairment or when there is an indication of impairment. If a business combination results in a negative goodwill, the Group reassesses whether it has correctly identified and measured all assets acquired and all liabilities assumed. If the negative goodwill remains after the reassessment, it is recognised as a gain in the profit or loss.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognised in profit or loss.

d. Fair value measurement

The Group measures financial instruments, such as derivatives, and certain non-derivative financial assets, at fair value at each balance sheet date. Also, fair values of financial instruments measured at amortised cost are disclosed in Note 27i.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- **Level 1** – Quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- **Level 2** – Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- **Level 3** – Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between Levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

e. Foreign currency

(i) Foreign currency transactions

Subsidiaries, joint ventures and equity accounted investees record transactions in the functional currency of the economic environment in which they operate. Transactions in currencies other than the functional currency of the subsidiary, joint ventures and equity investees are recorded at the rates of exchange prevailing at the date of the transaction.

Monetary assets and liabilities in currencies other than the functional currency are translated at the rates of exchange prevailing at the balance sheet date and gains and losses are reported in the statement of income.

(ii) Foreign operations

Upon consolidation, the balance sheets of subsidiaries with functional currencies other than the USD are translated at the rates of exchange prevailing at the end of the year. The statements of income denominated in currencies other than the USD are translated at the average rate for the year. The resulting exchange differences are recorded in equity through other comprehensive income and are included in the statement of income upon sale or liquidation of the underlying foreign operation.

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

f. Financial instruments

The financial assets are classified in the following measurement categories:

- Those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss), and
- Those to be measured at amortised cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. For investments in equity instruments, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income.

The Group reclassifies debt investments when and only when its business model for managing those assets changes. Reclassification takes place at the first day of the financial year following the financial year in which the business model changes.

At initial recognition, the group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss as incurred.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement of debt instruments depends on the Groups business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its debt instruments:

(i) Amortised cost

The Group classifies its financial assets as at amortised cost only if both of the following criteria are met:

- The asset is held within a business model with the objective of collecting the contractual cash flows, and
- The contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

Financial assets at amortised cost include loans receivable, trade and other receivables, and other financial assets that are held with the objective of collecting contractual cash flows. After initial measurement at fair value, the financial assets are measured at amortised cost using the effective interest rate (EIR) method, less impairment.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit or loss. The losses arising from impairment are recognised in the statement of profit or loss in other income.

(ii) Fair value through other comprehensive income

Financial assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment gains or losses, interest revenue and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss and recognised in other gains/(losses). Interest income from these financial assets is included in finance income using the effective interest rate method.

(iii) Financial assets at fair value through profit or loss

The Group classifies the following financial assets at fair value through profit or loss:

- Debt investments that do not qualify for measurement at amortised cost;
- Debt investments that do not qualify for measurement at fair value through other comprehensive income; and
- Debt investments that have been designated at fair value through profit or loss.

Financial assets at fair value through profit or loss include financial assets held for trading, debt securities and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value presented as other income/ (expenses) in profit or loss. Interests, dividends and gain/loss on foreign exchange on financial assets at fair value through profit or loss are included separately in finance income or other income respectively.

The Group enters into prepayment agreements where purchases of commodities are prepaid. When the prepayment agreement can be settled in cash or another financial asset, it is classified at amortised cost in line with IFRS 9. When settlement of the prepayment agreement solely occurs by having the commodities physically delivered, these agreements are not classified as financial instruments as they do not meet the definition of a financial asset. Interest received on prepayment agreements is presented in finance income in the statement of profit or loss.

The Group invested in listed equity securities and unlisted equity investments. The Group subsequently measures all equity investments at fair value. The Group classifies the following financial assets at fair value through profit or loss:

- Equity investments that are held for trading; and
- Equity investments for which the entity has not elected to recognise fair value gains and losses through other comprehensive income.

Where Group management has elected to present fair value gains and losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss. Dividends from such investments continue to be recognised in profit or loss as other income when the Groups' right to receive payments is established. There are no impairment requirements for equity investments measured at fair value through other comprehensive income. Changes in the fair value of financial assets at fair value through profit or loss are recognised in other gain/(losses) in the statement of profit or loss as applicable.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

Any interest in such transferred financial assets that is created or retained by the Group is recognised as a separate asset or liability.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position if, and only if, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Non-derivative financial liabilities

The Group measures non-derivative financial liabilities at amortised cost. The non-derivative financial liabilities are recognised initially at fair value less any directly attributable transaction costs. Subsequent to initial recognition, the financial liabilities are measured at amortised cost using the effective interest method.

The Group derecognises a financial liability when its contractual obligations are discharged, cancelled or expire.

Derivative financial instruments, including hedge accounting

Derivative instruments, which include physical contracts to sell or purchase commodities that do not meet the own use exemption, are initially recognised at fair value when the Group becomes a party to the contractual provisions of the instrument and are subsequently remeasured to fair value at the end of each reporting period. Any attributable transaction costs are recognised in profit or loss as incurred.

The Group utilises derivative financial instruments (shown separately in the statement of financial position) to hedge its primary market risk exposures, primarily risks related to commodity price movements, and to a lesser extent, exposure to foreign currency exchange rates and interest rate movements. Commodity derivative contracts may be utilised to hedge against commodity price risk for fixed priced physical purchase and sales contracts, including inventory. Commodity swaps, options and futures are used to manage price and timing risks in conformity with the Company's risk management policies.

Generally, the Group does not apply hedge accounting, but in some instances it may elect to apply hedge accounting. The Group elects to apply fair value hedge accounting to hedge certain risk components of non-financial hedged items. When applicable, the Group designates derivative hedging instruments as fair value hedges in relationship to the hedged item. The hedged item may be individual risk components which are separately identifiable and reliably measurable. The designated hedge derivatives are accounted for at fair value through profit and loss and reflected on the balance sheet as either a recognised asset or liability or an unrecognised firm commitment. Each of the identified risk components of the hedged item will be revalued at each period with its corresponding benchmark accounted for at fair value and recognised through profit and loss and reflected on the balance sheet as either a recognised asset or liability or an unrecognised firm commitment. The Group documents at the inception of the hedging transaction the economic relationship between hedging instruments and hedged items including whether the hedging instrument is expected to offset changes in cash flows of hedged items.

Those derivatives qualifying and designated as hedges are either (i) a fair value hedge of the change in fair value of a recognised asset or liability or an unrecognised firm commitment, or (ii) a cash flow hedge of the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable transaction.

A change in the fair value of derivatives designated as a fair value hedge is reflected together with the change in the fair value of the hedged item in the statement of profit or loss. A change in the fair value of derivatives designated as a cash flow hedge is initially recognised as a cash flow hedge reserve in OCI. The deferred amount is then released to the statement of profit or loss in the same periods during which the hedged transaction affects the statement of profit or loss.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remain in equity and is reclassified to profit or loss when the forecast transaction affects in profit or loss.

If the hedge ratio for risk management purposes is no longer optimal but the risk management objective remains unchanged and the hedge continues to qualify for hedge accounting, the hedge relationship will be rebalanced by adjusting either the volume of the hedging instrument or the volume of the hedged item so that the hedge ratio aligns with the ratio used for risk management purposes. Any hedge ineffectiveness is calculated and accounted for at the time of the hedge relationship rebalancing.

Current versus non-current classification

Derivative instruments that are not designated as effective hedging instruments are classified as current or non-current or separated into current and non-current portions based on an assessment of the facts and circumstances (i.e. the underlying contractual cash flows).

Where the Group will hold a derivative as an economic hedge (and does not apply hedge accounting) for a period beyond 12 months after the reporting date, the derivative is classified as non-current (or separated into current and noncurrent portions).

g. Cash and cash equivalents

Cash and cash equivalents include all cash on hand and short-term highly liquid investments such as deposits with original maturities of three months or less.

For the purpose of the consolidated statement of cash flows, cash and cash equivalent consist of cash and short-term deposits as defined above.

h. Property, plant and equipment

(i) Recognition and measurement

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses except for exploration and evaluation assets (see Note i). The initial cost of an asset comprises its purchase price or construction cost, any costs directly attributable to bringing the asset into operation, the initial estimate of any decommissioning obligation, if any, and, for qualifying assets, borrowing costs. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components). The costs of major repairs and maintenance (dry-docking or turnarounds) are capitalised and depreciated over their useful life.

Gains or losses on disposal of an item of property, plant and equipment are recorded in the statement of income under 'Other income/ (expense)'.

The carrying value of property and equipment is reviewed for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable.

Assets in the course of construction are capitalised as a separate component of property, plant and equipment. Upon completion, the cost of construction is transferred to the appropriate category.

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

(ii) Subsequent costs

Subsequent expenditure is capitalised only when it is probable that the future economic benefits associated with the expenditure will flow to the Group. Ongoing repairs and maintenance are expensed as incurred.

(iii) Depreciation

Items of property, plant and equipment are depreciated on a straight-line basis over the estimated useful lives of each component. Land is not depreciated.

Items of property, plant and equipment are depreciated from the date that they are installed and are ready for use. Assets under construction are not depreciated.

Depreciation of assets held under finance leases is calculated over the shorter of the lease term or the estimated useful life of the asset.

The estimated useful lives for the current and comparative years of significant items of property, plant and equipment are as follows:

- Buildings 20-33 years
- Machinery and equipment 3-20 years
- Barges and vessels 10-20 years
- Other fixed assets 1-5 years

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

(iv) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e. assets that necessarily take a substantial period of time to get ready for their intended use or sale, are calculated using the effective interest rate method and are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised.

All other borrowing costs (including borrowing costs related to exploration and evaluation expenditures) are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs directly in connection with the borrowing of funds.

i. Exploration and evaluation expenditure

Exploration and evaluation expenditure relates to costs incurred on the exploration and evaluation of potential mineral and petroleum resources and include costs such as the acquisition of rights to explore, topographical geological, geochemical and geophysical studies, exploratory drilling and other activities in relation to evaluating the technical feasibility and commercial viability of extracting a mineral resource. These costs are capitalised as an asset and measured at cost and recognised as a component of property, plant or equipment. Purchased exploration and evaluation assets are recognised at their fair value at acquisition.

All capitalised exploration and evaluation expenditure is monitored for indications of impairment. Where a potential impairment is indicated, an assessment is performed for each area of interest or at the cash generating unit level. To the extent that capitalised expenditure is not expected to be recovered it is charged to the statement of income.

When commercially recoverable reserves are determined and such development receives the appropriate approvals, capitalised exploration and evaluation expenditure is transferred to 'Development Properties'.

j. Development expenditure

Development expenditure incurred by or on behalf of the Group are accumulated separately for each area of interest in which economically recoverable reserves have been identified, and are capitalised only if they can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. They are included as a component of property, plant and equipment as 'Development Properties'.

With regards to mines, the development property is reclassified as 'Mining Interests' at the end of the development phase, when the mine is capable of operating in the manner intended by management.

No depreciation is recognised in respect of development properties until they are classified as 'Mining Interests'.

Each development property is tested for impairment, see Note 3o. Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in profit or loss as incurred Mining interests

When further development expenditures are incurred in respect of a mining interest after the commencement of production, such expenditures are carried forward as part of the mining interests when it is probable that additional future economic benefits associated with the expenditure will flow to the consolidated entity. Otherwise such expenditures are classified as a cost of production.

Depreciation is charged using the unit of production method, with separate calculations being made for each area of interest. The unit of production basis results in a depreciation charge proportional to the depletion of proven and probable reserves.

Mining interests are tested for impairment.

k. Deferred stripping costs

Stripping costs incurred in the development of a mine (or pit) before production commences are capitalised as part of the cost of constructing the mine (or pit) and subsequently amortised over the life of the mine (or pit) on a unit of production basis. The removal of overburden waste is required to obtain access to the ore body.

Production stripping costs are deferred when the actual stripping ratio incurred significantly exceeds the expected long-term average stripping ratio and are subsequently amortised when the actual stripping ratio falls below the long-term average stripping ratio. Where the ore is expected to be evenly distributed, waste removal is expensed as incurred.

l. Intangible assets and goodwill

(i) Goodwill

Goodwill that arises on the acquisition of subsidiaries is presented with intangible assets. For the measurement of goodwill at initial recognition see Note c.

Goodwill is measured at cost less accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units or group of cash generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquired are assigned to those units.

Where goodwill has been allocated to a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain and loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the cash-generating unit retained.

In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and any impairment loss is allocated to the carrying amount of the equity-accounted investee as a whole.

(ii) Mineral and petroleum rights

Mineral and petroleum reserves, resources and rights (together 'Mineral rights') which can be reasonably valued, are recognised in the assessment of fair values on acquisition. Mineral rights for which values cannot be reasonably determined are not recognised. Exploitable Mineral rights are amortised using the unit of production method over the commercially recoverable reserves and, in certain circumstances, other mineral resources. Mineral resources are included in amortisation calculations where there is a high degree of confidence that they will be extracted in an economic manner.

(iii) Other intangible assets

Other intangible assets include licences and are stated at cost, less accumulated amortisation and accumulated impairment losses. Licences are amortised over the term of the licence, generally not exceeding 10 years.

An intangible asset acquired as part of a business combination is measured at fair value at the date of acquisition and is recognised separately from goodwill if the asset is separable or arises from contractual or other legal rights.

Intangible assets with finite lives are amortised over their useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each reporting date. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, and treated as changes in the accounting estimates.

Gains or losses on disposal of intangible assets are recorded in the statement of income under 'Other income/(expense)'.

m. Leases

The Group is the lessee of equipment, buildings, vessels and terminals under various operating and finance leases. The Group classifies its leases as operating or finance leases based upon whether the lease agreement transfers substantially all the risks and rewards of ownership.

For leases determined to be finance leases, an asset and liability are recognised at an amount equal to the lower of the fair value of the leased asset or the present value of the minimum lease payments during the lease term. Such assets are amortised on a straight-line basis over the shorter of the lease term or the estimated useful life of the asset taking into account the residual value, with depreciation included in depreciation expense.

Leases that do not qualify as finance leases are classified as operating leases, and the related rental payments are expensed on a straight-line basis over the lease term.

If a sale and leaseback transaction can be classified as an operational lease, which implies that substantially all the risks and rewards of ownership of the lease agreement have been transferred, the difference between the carrying value and the consideration of the sold assets will be accounted for in the profit and loss under other income.

n. Inventories

Trading-related inventories are measured at fair value less costs to sell. Fair value movements are included in profit and loss.

Inventories of non-trading related products are measured at the lower of cost or net realisable value. Costs comprise all costs of purchases and other costs incurred.

o. Impairment of financial instruments

Non-derivative financial assets

The Group assesses the expected credit losses associated with its debt instruments and trade receivables carried at amortised cost and fair value through other comprehensive income. The impairment provisions for financial assets disclosed in Notes 15 and 16 are based on assumptions about risk of default and expected loss rates. The company uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period.

Trade receivables

The Group applies the simplified approach to providing for expected credit losses, which permits the use of the lifetime expected loss provision for all trade receivables. In calculating the expected credit loss rates for trade receivables, the company considers historical loss rates for each category of counterparties, and adjusts for forward looking macroeconomic data. Refer to Note 18 for the loss provision on trade receivables.

Loans receivable

Over the term of the loans, the Group manages its credit risk by appropriately providing for expected credit losses on a timely basis. In calculating the expected credit loss rates, the Group considers historical loss rates for each category of counterparties, and adjusts for forward looking macroeconomic data. The Group classifies its loans receivable in three categories that reflect their credit risk as follows:

Category	Group definition of category	Basis for recognition of expected credit loss provision
Performing	Customers have a low risk of default and a strong capacity to meet contractual cash flows	12 month expected losses. Where the expected lifetime of an asset is less than 12 months, expected losses are measured at its expected lifetime.
Non-performing	Interest and/or principal repayments are past due and credit risk level shows a significant increase	Lifetime expected losses
Write-off	Based on observable data the interest and/or principal will not be collected	Asset is written off through profit or loss to extent of expected loss

The Group recognises expected credit losses when a payment is received past it's due date, even though it is received in full. Refer to

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

Note 15 for the loss provision on loans receivable.

Write-off

The Group also assesses at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred 'loss event') and that the loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated.

Objective evidence that financial assets are impaired may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

If the decrease in impairment relates to an objective event occurring after the impairment was recognised, a previously recognised impairment loss is reversed to a maximum of the amount required to carry the asset at amortised cost at the time of the reversal if no impairment had taken place while taking into consideration the expected credit losses associated to the instrument. The Group recognises in profit or loss, as an impairment gain, the amount of expected credit losses reversal that is required to adjust the loss allowance at the reporting date to the amount that is required to be recognised under the expected credit loss model.

p. Accrued turnover

Accrued turnover relates to sales made before the end of the year that have not been invoiced at the balance sheet date. Reasons for such delays include the need to determine final pricing, quantity and quality analysis. All are typical of the industry in which the Group operates.

q. Employee benefits

(i) Post-employment benefits

The Group provides direct contributions to individual employee pension schemes, which are expensed to net income in the year. Accordingly, there is no significant post-employment benefit liabilities associated with the Group.

(ii) Employee share incentive plan and employee share trust

Employees of the Group receive remuneration in the form of shares of the immediate holding company Trafigura Beheer B.V. as consideration for services rendered. This is considered an equity-settled share scheme as the Company neither has a present legal nor constructive obligation to settle in cash nor has a past practice or stated policy of settling in cash.

The cost of the equity-settled transactions is measured at fair value at the grant date taking into account the terms and conditions upon which the shares were granted. This fair value is expensed over the vesting period with a corresponding credit to equity. For shares that immediately vest, the fair value is expensed in the same accounting period corresponding to the date of grant.

r. Provisions

The Group recognises provisions for liabilities and onerous contracts that have been incurred as of the balance sheet date and can be reliably estimated. A provision is recognised when (i) the Group has a present obligation (legal or constructive) as a result of a particular event; (ii) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and (iii) an estimate can be made of the amount of the obligation.

Provisions for claims, disputes and legal proceedings are recorded if it is probable that the Group will be liable in a proceeding, for the estimated amount at which the liability can be settled. If the amount for which the liability can be settled cannot be reliably estimated, the claim, dispute or legal proceeding is disclosed, if it is expected to be significant.

(i) Restoration, rehabilitation and decommissioning

Restoration, rehabilitation and decommissioning costs arising from the installation of plant and other site preparation work, discounted to their net present value, are provided for and capitalised at the time such an obligation arises. The costs are charged to the statement of income over the life of the operation through depreciation of the asset and the unwinding of the discount on the provision. Costs for restoration of subsequent site disturbance, which a created on an ongoing basis during production, are provided for at their net present values and charged to the statement of income as extraction progresses. If the obligation results from production (e.g. extraction of reserves) these are recognised as extraction occurs.

(ii) Onerous contracts

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Group recognises any impairment loss on the assets associated with that contract.

s. Accrued costs of sales and expenses

The accrued cost of sales and expenses relate to purchases and expenses made before the year end that have not been invoiced at the balance sheet date. Reasons for such delays include the need to determine final pricing, quantity and quality analysis. All are typical of the industry in which the Group operates.

t. Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty. The Group assesses its revenue arrangements against specific criteria in order to determine if it is acting as principal or agent.

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured, regardless of when the payment is being made. The following specific recognition criteria must also be met before revenue is recognised.

Revenue from the sale of goods which are transported in discrete cargoes is recognised when the significant risk and rewards of the goods have passed to the buyer, which is usually the date of the bill of lading. Revenue from the sale of goods which are transported in continuous systems is recognised when the goods have been delivered.

Revenue from the sale of goods which are consigned to counterparties on a sale-and-return basis is recognised when the goods are sold to the customers on a non-recourse basis. At these points the

quantity and the quality of the goods has been determined with reasonable accuracy, the price is fixed or determinable, and collectability is reasonably assured.

Revenue from rendering of services is recognised in the statement of income in proportion to the stage of the rendered performance as at the balance sheet date.

u. Cost of sales

Cost of sales includes the purchase price of the products sold, as well as the costs of purchasing, storing, and transporting the products. It also includes the changes in mark to market valuation of inventories, all derivatives and forward contracts.

v. Selling, general and administrative expenses

Selling, general and administrative expenses includes the Group's corporate offices, rent and facility costs, and certain other general and administrative expenses which do not relate directly to the activities of a single business segment.

w. Finance income and finance expense

Interest income and interest expense are recognised on a time-proportion basis using the effective interest method.

x. Corporate taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognised in statement of income except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

(i) Current income tax

Current income tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. The charge for taxation includes Singaporean and foreign corporate income taxation. Due to the different statutory rates applicable and non-deductible expenses, the Group effective tax charge differs from the statutory tax rate applicable in Singapore.

(ii) Deferred tax

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(iii) Tax exposure

In determining the amount of current and deferred tax the Company takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Company believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Company to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

y. Assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sales transaction rather than through continuing use. For this to be the case, the asset or disposal group must be available for immediate sale in its present condition subject only to terms that are usual and customary for the sale of such assets or disposal groups and its sale must be highly probable. All assets and liabilities of a subsidiary classified as a disposal group are reclassified as held for sale regardless of whether the Group retains a non-controlling interest in its former subsidiary after the sale.

Non-current assets and disposal groups (other than financial assets) classified as held for sale are measured at the lower of their carrying amounts and fair values less costs to sell. Property, plant and equipment and intangible assets classified as held for sale are not depreciated or amortised.

z. Segments

The Group's operating segments are established on the basis of those components of the group that are evaluated regularly by the chief operating decision maker (CODM) in deciding how to allocate resources and in assessing performance.

aa. Use of estimates and judgements

The preparation of the Group's financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period.

The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual outcomes could differ from those estimates. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

The Group has identified the following areas as being critical to understanding the Company's financial position as they require management to make complex and/or subjective judgments and estimates about matters that are inherently uncertain.

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

(i) Valuation of derivative instruments

Derivative instruments are carried at fair value and the Group evaluates the quality and reliability of the assumptions and data used to measure fair value in the three hierarchy levels, Level 1, 2 and 3, as prescribed by IFRS 13. Fair values are determined in the following ways: externally verified via comparison to quoted market prices in active markets (Level 1); by using models with externally verifiable inputs (Level 2); or by using alternative procedures such as comparison to comparable instruments and/or using models with unobservable market inputs requiring the Group to make market based assumptions (Level 3). For more details refer to Note 27. For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between Levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

(ii) Depreciation and amortisation of mineral rights and development costs

Mineral rights and development costs are amortised using UOP (unit of production). The calculation of the UOP rate of amortisation, and therefore the annual amortisation charge to operations, can fluctuate from initial estimates. This could generally result when there are significant changes in any of the factors or assumptions used in estimating mineral or petroleum reserves, notably changes in the geology of the reserves and assumptions used in determining the economic feasibility of the reserves. Such changes in reserves could similarly impact the useful lives of assets depreciated on a straight line basis, where those lives are limited to the life of the project, which in turn is limited to the life of the proven and probable mineral or petroleum reserves. Estimates of proven and probable reserves are prepared by experts in extraction, geology and reserve determination. Assessments of UOP rates against the estimated reserve and resource base and the operating and development plan are performed regularly. Refer to Note 11 and Note 12.

(iii) Impairments

Investments in associates and other investments, loans receivables and property, plant and equipment and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be fully recoverable or at least annually for goodwill and other indefinite life intangible assets. If an asset's recoverable amount is less than the asset's carrying amount, an impairment loss is recognised. Loans and receivables are evaluated based on collectability. Future cash flow estimates which are used to calculate the asset's fair value are based on expectations about future operations primarily comprising estimates about production and sales volumes, commodity prices, reserves and resources, operating, rehabilitation and restoration costs and capital expenditures. Changes in such estimates could impact recoverable values of these assets. Estimates are reviewed regularly by management. Refer to Note 11, Note 12, Note 13 and Note 15.

(iv) Provisions

The amount recognised as a provision, including tax, legal, restoration and rehabilitation, contractual and other exposures or obligations, is the best estimate of the consideration required to settle the related liability, including any related interest charges, taking into account the risks and uncertainties surrounding the obligation. The Group assesses its liabilities and contingencies based upon the best information available, relevant tax laws and other appropriate requirements. Refer to Note 24.

(v) Restoration, rehabilitation and decommissioning costs

A provision for future restoration, rehabilitation and decommissioning costs requires estimates and assumptions to be made around the relevant regulatory framework, the magnitude of the possible disturbance and the timing, extent and costs of the required closure and rehabilitation activities. To the extent that the actual future costs differ from these estimates, adjustments will be recorded and the statement of income could be impacted. The provisions including the estimates and assumptions contained therein are reviewed regularly by management. Refer to Note 24.

(vi) Taxation

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. These judgements are subject to risk and uncertainty and hence, to the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in income in the period in which the change occurs. The recoverability of deferred tax assets including the estimates and assumptions contained therein are reviewed regularly by management. Refer to Note 10.

(vii) Determination of control of subsidiaries and joint arrangements

Judgement is required to determine whether the Company has control or joint control, which requires an assessment of the relevant activities (those relating to establishing operating and capital decisions of the arrangement, such as: the approval of the budget including the capital expenditure programme for each year, determining the funding structure and appointing, remunerating and terminating the key management personnel or service providers of the operations) and when the decisions in relation to those activities are under the control of the Company or require unanimous consent. Judgement is also required in determining the classification of a joint arrangement between a joint venture or a joint operation through an evaluation of the rights and obligations arising from the arrangement. Differing conclusions around these judgements, may materially impact how these businesses are presented in the consolidated financial statements – under the full consolidation method, equity method or proportionate share of assets and liabilities. Refer to Note 6.

4. OPERATING SEGMENTS

The Group's operating businesses are organised and managed separately according to the nature of the products, with each segment representing a strategic unit that offers different products and serves different markets.

Segment results that are reported to the Group's Chief Executive Officer (CEO) (the chief operating decision maker) include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

- The Oil and Petroleum Products segment is engaged in the sourcing, provision and storage of oil, at all stages from crude to finished products such as naphtha and gasoline. This includes the blending required to make gasoline in the various grades suitable for the different specifications relevant in different countries.
- The Metals and Minerals segment trades copper, lead, zinc, aluminium, iron ore and coal in all forms including ores, concentrates, and refined

metals. There is involvement in all the various stages from mining through smelting to the finished metal. This segment also includes the Mining group and Impala Warehousing and Logistics and includes the blending of metal concentrates, iron ore, coal and alumina, as well as warehousing and transportation.

- All other segments includes holding companies, and some smaller operating companies.

Information regarding the results of each reportable segment is included below. Performance is measured based on segment gross profit, as included in the internal management reports that are reviewed by the Group's CEO. Segment gross profit is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

The accounting policies of the operating segments are the same as those described in the summary of significant accounting policies. Trafigura accounts for inter-segment sales and transfers where applicable as if the sales or transfers were to third parties, i.e. at arm's length commercial terms.

Reconciliations of reportable segment revenues, profit or loss, assets and liabilities, and other material items:

2016	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Revenue from external customers	63,831.3	34,266.5	–	98,097.8
Gross profit	**1,460.3**	**830.9**		**2,291.2**
Other income/(expenses)				(233.2)
General and administrative expenses				(946.7)
Finance income				387.0
Finance expense				(507.7)
Share of profit/(loss) of equity-accounted investees				94.3
Income tax expense				(110.2)
Profit for the year				**974.7**

2016	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Segment assets				
Equity-accounted investees	2,345.6	1,109.4	9.4	3,464.4
Other assets	20,184.3	12,417.6	5,163.8	37,765.7
Total segment assets	**22,529.9**	**13,527.0**	**5,173.2**	**41,230.1**
Segment liabilities				
Total segment liabilities	**(14,678.0)**	**(10,444.0)**	**(10,261.0)**	**(35,383.0)**
Other segment information				
Capital expenditure	302.7	326.4	125.1	754.2
Depreciation and amortisation	39.8	75.3	89.6	204.7
Impairment of non-financial assets	0.8	(169.3)	–	(168.5)
Impairment of financial assets	8.0	25.5	6.3	39.8
Impairment of equity-accounted investees	–	250.0	–	250.0

2015	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Revenue from external customers	65,262.7	31,973.8	–	97,236.5
Gross profit	**1,680.3**	**920.1**		**2,600.4**
Other income/(expenses)				(198.4)
General and administrative expenses				(994.8)
Finance income				228.5
Finance expense				(479.0)
Share of profit/(loss) of equity-accounted investees				87.8
Income tax expense				(141.1)
Profit for the year				**1,103.4**

2015	Oil and Petroleum USD'M	Metals and Minerals USD'M	All other segments USD'M	Total USD'M
Segment assets				
Equity-accounted investees	2,091.8	1,074.5	1.2	3,167.5
Other segment assets	20,610.9	11,831.1	3,477.2	35,919.2
Total segment assets	**22,702.7**	**12,905.6**	**3,478.4**	**39,086.7**
Segment liabilities				
Total segment liabilities	**(17,720.4)**	**(7,894.1)**	**(7,814.6)**	**(33,429.1)**
Other segment information				
Capital expenditure	152.7	851.2	219.5	1,223.4
Depreciation and amortisation	40.5	114.3	64.9	219.7
Impairment of non-financial assets	–	407.3	–	407.3
Impairment of financial assets	–	14.0	–	14.0
Impairment of equity-accounted investees	2.0	45.9	–	47.9

Geographical information

The following table sets out information about the geographical location of the Group's revenue from external customers:

2016	Oil and Petroleum USD'M	Metals and Minerals USD'M	Total USD'M
Revenue from external customers			
Europe	16,559.4	9,805.8	26,365.2
Asia	17,744.1	19,673.6	37,417.7
North America	13,791.3	2,348.8	16,140.1
Latin America	6,516.6	1,346.9	7,863.5
Africa	4,775.8	745.8	5,521.6
Australia	573.0	225.3	798.3
Middle East	3,871.1	120.3	3,991.4
Total revenue from external customers	**63,831.3**	**34,266.5**	**98,097.8**

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

2015	Oil and Petroleum USD'M	Metals and Minerals USD'M	Total USD'M
Revenue from external customers			
Europe	16,523.7	6,790.4	23,314.1
Asia	8,271.2	20,337.7	28,608.9
North America	10,651.1	2,762.4	13,413.5
Latin America	11,372.0	1,375.8	12,747.8
Africa	13,820.3	609.9	14,430.2
Australia	1,269.1	–	1,269.1
Middle East	3,355.3	97.6	3,452.9
Total revenue from external customers	**65,262.7**	**31,973.8**	**97,236.5**

5. ACQUISITIONS OF SUBSIDIARY AND NON-CONTROLLING INTERESTS

There were no significant transactions during the year, nor in 2015, to acquire subsidiaries or non-controlling interests.

6. DECONSOLIDATION OF SUBSIDIARIES

a. 2016

AEMR SA, Angola

During the second quarter of financial year 2016, the Group has reversed the impairment it had recorded in financial year 2015 of USD243.6 million in respect of the iron-ore investment in AEMR SA, Angola (AEMR). A presidential decree has been issued in February 2016 which will result in the liquidation of AEMR. The Group obtained a signed Instrument of Confession of Indebtedness (the 'Debt Instrument') from the Angolan Ministry of Finance. Under the Debt Instrument, the Angolan Ministry of Finance will assume a consolidated debt value of USD409 million to the DT Group as compensation for the investments that the DT Group has made in AEMR. The debt is payable to the Group over a period of 48 months commencing in January 2017 and has thus been recorded at a discounted value of USD357.6 million under loans receivable.

As part of this arrangement, the assets held by AEMR are in the process of being transferred to the non-controlling interest partner in AEMR (Ferrangol). As a result of the arrangement, it has been concluded that the Group no longer has control over AEMR and therefore AEMR has been deconsolidated in the Group's consolidated financial statements as per 31 March 2016. The divestment of AEMR, presented under assets held for sale, and the recognition of the receivable towards the Angolan Ministry of Finance resulted in a gain of USD264.6 million recorded in Other income split between a reversal of impairment of USD243.6 million and gain on divestment of subsidiary of USD21 million (refer to Note 8). After taking into account non-controlling interest, the net result of the impairment reversal and the divestment of AEMR attributable to owners of the company is USD72 million.

b. 2015

Minas de Aguas Teñidas (MATSA)

On 29 June 2015 the Company entered into an agreement with Mubadala Development Company to create a 50/50 joint-venture company to invest in the base metals mining sector, including copper and zinc. As part of this agreement, the Company has sold 50% of its share in Minas de Aguas Teñidas (MATSA) for a consideration of USD674 million. Mubadala's ownership became effective as of 30 September 2015, although the legal closing process was not completed until 13 October 2015. The consideration was received in 2016.

This divestment resulted in a loss of control and deconsolidation of MATSA per 30 September 2015. As of this date the investment is accounted for as an equity investment. Gains recognised in other income in relation to the divestment amount to USD289.9 million.

7. REVENUE

	2016 USD'M	2015 USD'M
Sales of goods	**97,722.0**	96,896.3
Rendering of services	**375.8**	340.2
Total	**98,097.8**	97,236.5

8. OTHER INCOME/(EXPENSE)

	2016 USD'M	2015 USD'M
Release/(additions) to provisions	**6.7**	(72.4)
Gain/(loss) on disposal of tangible and intangible fixed assets	**12.4**	11.3
Gain/(loss) from disposal of other investments	**0.1**	–
Gain/(loss) on sale of equity-accounted investees	**(5.4)**	0.4
Gain/(loss) on divestment of subsidiaries	**20.3**	139.5
Gain/(loss) on fair value through profit and loss instruments	**(134.2)**	34.8
Impairments of financial assets	**(39.8)**	(14.0)
Impairments of non-financial assets	**(75.1)**	(407.3)
Reversal of impairments of non-financial assets	**243.6**	–
Impairments of equity-accounted investees	**(250.0)**	(47.9)
Dividend income	**0.4**	0.5
Gain/loss on foreign exchange	**7.1**	10.6
Revaluation gain	**–**	147.8
Other	**(19.3)**	(1.7)
Total	**(233.2)**	(198.4)

In 2016 the Group entered into sale and leaseback transactions of 17 vessels which have been leased back for periods ranging between 8 and 10 years. These sale and leaseback transactions generated a total gain of USD16.1 million which is accounted for as a gain on disposal of tangible and intangible assets.

Loss on fair value through profit and loss instruments includes USD126.7 million (2015: gain USD78.5 million) relating to a partial disposal as well as negative fair value movements of the debt securities related to Trafigura's investment in Porto Sudeste do Brasil SA.

During the regular assessment to determine asset impairment, the Group decided to record an impairment of USD42.7 million on non-financial assets related to the Group's railway operation in Colombia. Overall, the future operations and projected financial performances do not demonstrate sufficient discounted future cash flows to support the assets book values, leading to the impairment. The operations have been negatively impacted by a number of safety and security concerns, a complex economic environment and a consequent lack of sustainable profit growth in the current context.

For details on the reversal of impairments relating to non-financial assets please refer to Note 6.

The 2016 impairments of equity accounted investees consist of the impairment in Porto Sudeste. For a description of this impairment please refer to Note 13. In 2015 this item consisted mainly of an impairment of USD34.5 million in Nyrstar NV.

In 2015, Trafigura reduced its stake in Minas de Aguas Teñidas (MATSA) as described in Note 6. The gain of USD142.1 million from divestment of the 50% interest is included as a gain on divestment of subsidiaries. The gain of USD147.8 million from remeasuring the retained interest at fair value was recorded as a revaluation gain.

For details on the impairments of non-financial assets, refer to Notes 11 and 12.

For the additions to provisions we refer to Note 24.

9. GENERAL AND ADMINISTRATIVE EXPENSES

	2016 USD'M	2015 USD'M
Depreciation and amortisation	**204.7**	219.7
Staff costs	**513.5**	504.3
General and other	**228.5**	270.8
Total	**946.7**	994.8

The total fees in respect to the procedures applied to the Group by Ernst & Young Accountants LLP, the Netherlands ('EY'), the external auditor, and other member firms of EY including their tax services and advisory groups amounted to USD5.7 million in 2016 (2015: USD6.6 million), which included USD0.2 million (2015: USD0.1 million) for assurance related services, USD1.2 million (2015: USD1.0 million) for tax advisory and compliance services, and USD0.2 (2015: USD nil) for transaction support services.

The financial statements audit fees include the aggregate fees in each of 2016 and 2015 financial years for professional services rendered for the audit of the Group's annual financial statements. Assurance related fees include the fees in relation to the annual statutory financial statement audit of subsidiaries or services that are normally provided by the auditor in connection with the audits. Transaction support fees relate to due diligence and assurance services in respect of potential acquisitions and/or divestitures.

Refer to Note 28, employee benefits, for a breakdown of the staff costs.

10. TAX

a. Tax expense

Income tax expense recognised in the statement of income consists of the following:

	2016 USD'M	2015 USD'M
Current income tax expense	**102.0**	184.4
Adjustments in relation to current income tax of previous year	**(9.4)**	(1.2)
Deferred tax expense/(income)	**14.0**	(47.6)
Withholding tax in the current year	**3.6**	5.5
Total	**110.2**	141.1

b. Tax recognised in other comprehensive income

The tax credit/ (charge) relating to components of other comprehensive income and equity is as follows:

	2016 USD'M	2015 USD'M
Tax expense/(income) on cash flow hedges	**(3.3)**	(5.2)
Total	**(3.3)**	(5.2)

c. Reconciliation of effective tax rate

The Group's effective tax rate differs from the statutory income tax rate of the Singapore which was 17% in 2016 (2015: 17%).

The reconciliation between tax expense and the result of accounting profit multiplied by the Company's statutory income tax rate for the years ended 30 September 2016 and 2015 is as follows:

	2016 USD'M	2016 %	2015 USD'M	2015 %
Profit before tax	**1,084.9**		1,244.5	
Income tax expense at expected statutory blended tax rate	**203.1**	**18.7%**	205.5	17.8%
Tax effect of adjustments to arrive at the effective income tax rate:				
Effect of unrecognised and unused tax losses, not recognised as deferred tax assets	**51.7**		58.3	
Income exempt or subject to specific tax holidays	**(141.9)**		(160.7)	
Non-deductible expenses	**3.1**		33.7	
Adjustments in relation to income tax of previous years	**(9.4)**		(1.2)	
Withholding tax	**3.6**		5.5	
	110.2		141.1	
Effective tax rate		**10.2%**		11.3%

d. Deferred tax assets and liabilities

	2016 USD'M	2015 USD'M
Property, plant and equipment and other assets	**(161.3)**	(161.1)
Derivatives	**–**	13.7
Losses	**96.5**	152.9
Other temporary differences	**(20.9)**	(88.7)
Deferred tax liability, net	**(85.7)**	(83.2)

	2016 USD'M	2015 USD'M
Reflected in the consolidated balance sheet as follows:		
Deferred tax assets	**103.8**	169.9
Deferred tax liabilities	**(189.5)**	(253.1)
Deferred tax liability, net	**(85.7)**	(83.2)

	2016 USD'M	2015 USD'M
Opening balance as at 1 October	**(83.2)**	(171.5)
Tax expense during the period recognised in profit or loss	**(13.9)**	47.6
Other comprehensive income	**(2.8)**	5.2
Deferred taxes deconsolidated business combinations	**–**	107.1
Foreign currency differences and other	**14.2**	(71.6)
Closing balance as at 30 September	**(85.7)**	(83.2)

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

The tax losses expire within five years (2016: USD5.1 million; 2015: USD3.3 million), more than five years (2016: USD18.4 million; 2015: USD14.0 million) or do not expire (2016: USD55.7 million; 2015: USD32.4 million). The deductible temporary differences do not expire under current tax legislation. Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profit will be available against which the Group can utilise the benefits from.

The Group has unrecognised deferred tax assets amounting of USD78.2 million (2015: USD49.7 million).

e. Tax uncertainties

Trafigura operates numerous jurisdictions worldwide resulting in cross border intercompany transactions whereby the transfer pricing rules applied in one country have an impact on the results in another country.

In order to reduce transfer pricing uncertainties, transfer pricing studies are performed and reports are prepared to fulfil local transfer pricing requirements.

Due to complexity of tax rules, interpretation by local taxing authorities can differ from Trafigura's interpretation based on opinions provided by local tax counsel.

In countries where Trafigura starts new operations or alters business models, the issue of permanent establishment and profit allocation thereto may arise. The risk is that taxing authorities in multiple jurisdictions claim taxation rights over the same profit.

11. PROPERTY, PLANT AND EQUIPMENT

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Exploration and evaluation assets	Other fixed assets	Total
Cost						
Balance at 1 October 2015	805.7	462.2	648.0	–	1,180.5	3,096.4
Additions	69.1	36.4	96.8	–	506.1	708.4
Reclassifications	178.4	103.9	392.3	–	(681.7)	(7.1)
Effect of movements in exchange rates	(56.7)	(0.3)	0.8	–	2.7	(53.5)
Disposals	(27.6)	(15.3)	(483.5)	-	(63.1)	(589.5)
Balance at 30 September 2016	**968.9**	**587.0**	**654.4**	**–**	**944.4**	**3,154.7**
Depreciation and impairment losses						
Balance at 1 October 2015	171.9	247.1	88.2	–	188.8	696.1
Depreciation for the year	46.8	19.6	51.9	–	29.7	148.0
Impairment losses	7.6	5.1	3.3	–	40.2	56.2
Reclassification	0.5	11.4	(9.4)	–	(3.6)	(1.1)
Effect of movements in exchange rates	(1.1)	0.5	0.3	–	1.5	1.2
Disposals	(7.7)	(12.8)	(51.5)	–	(18.7)	(90.7)
Balance at 30 September 2016	**218.0**	**270.9**	**82.9**	**–**	**237.9**	**809.7**
Net book value at 30 September 2016	**750.9**	**316.0**	**571.5**	**–**	**706.6**	**2,345.0**

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Exploration and evaluation assets	Other fixed assets	Total
Cost						
Balance at 1 October 2014	955.9	591.6	443.8	387.5	1,247.5	3,626.3
Additions	148.7	39.5	66.6	2.4	839.8	1,097.0
Reclassifications	421.2	(3.1)	254.6	(152.7)	(855.7)	(335.6)
Effect of movements in exchange rates	(22.3)	(2.9)	(3.1)	–	(5.2)	(33.5)
Disposals	(10.7)	(11.8)	(113.9)	–	(12.2)	(148.6)
Divestments of subsidiaries	(687.1)	(151.1)	–	(237.2)	(33.7)	(1,109.2)
Balance at 30 September 2015	**805.7**	**462.2**	**648.0**	**–**	**1,180.5**	**3,096.4**
Depreciation and impairment losses						
Balance at 1 October 2014	216.1	165.5	59.6	–	176.8	618.0
Depreciation for the year	65.0	33.2	22.1	–	47.5	167.8
Impairment losses	18.8	105.4	–	219.5	33.5	377.2
Reclassification	(9.8)	1.8	14.4	(219.5)	(32.8)	(245.9)
Effect of movements in exchange rates	(1.0)	(2.4)	(0.1)	–	(0.9)	(4.4)
Disposals	(6.2)	(6.1)	(7.8)	–	(1.6)	(21.7)
Divestments of subsidiaries	(111.0)	(50.3)	–	–	(33.7)	(195.0)
Balance at 30 September 2015	**171.9**	**247.1**	**88.2**	**–**	**188.8**	**696.1**
Net book value at 30 September 2015	**633.8**	**215.1**	**559.8**	**–**	**991.7**	**2,400.3**

Machinery and equipment mainly consists of specialised industrial equipment.

Included in the Other fixed assets category is assets under construction, which relates to assets not yet in use. Total balance at 30 September 2016 amounted to USD618.7 million (2015: USD886.3 million). Once the assets under construction come into operation they are reclassified to the appropriate asset category and it is from that point that they are depreciated. Further other fixed assets mainly consist of small equipment, computer hardware, software licences, office equipment and refurbishment.

The net book value of property, plant and equipment acquired under finance leases at 30 September 2016 was USD38.8 million (2015: USD48.8 million).

Certain items of property, plant and equipment are pledged as collateral for an amount of USD545.9 million (2015: USD662.5 million).

Depreciation expenses are included in general and administrative expenses. Impairment charges are included in other income and expense.

During the financial year ended 30 September 2016, the Company has capitalised borrowing cost of a total amount of USD35.8 million under other fixed assets (2015: USD86.6 million) which mainly relates to the multimodal logistics and infrastructure project along the Magdelena river in Colombia. These borrowing costs are based upon a capitalisation rate of 5.50% – 8.00% of the eligible assets.

In 2016 the Group entered into sale and leaseback transactions of 17 vessels which have been leased back for periods ranging between 8 and 10 years. Under these agreements three of the vessels are still due, with delivery expected in the first and second quarter of 2017. The sale and leaseback transactions have generated proceeds in 2016 of USD449.0 million and a gain of USD16.1 million. The sale and leaseback transactions can be classified as an operational lease. The gain is accounted for under other operating income. The lease agreements are in line with market rent for longer-term charters. The future charter commitments of these leases are included in the outstanding commitments under Note 27.

During the regular assessment to determine asset impairment, the Group decided to record an impairment of USD42.7 million on non-financial assets related to the Group's railway operation in Colombia. The operations have been negatively impacted by a number of safety and security concerns, a complex economic environment and a consequent lack of sustainable profit growth in the current context. The investment has been impaired up until the value we expect to receive on the remaining asset.

In 2015, during the regular assessment in determining an indication of asset impairment or whether a previously recorded impairment may no longer be required the evaluation of projects and forecasts and mining assets resulted in an impairment charge of USD323.6 million in relation to Impala Terminals Burnside and the iron-ore investment in AEMR SA, Angola. The net result of the impairment on result attributable to owners of the company is USD167.1 million after taking into account non-controlling interests.

12. INTANGIBLE ASSETS

USD'M	Goodwill	Licences	Mineral rights	Other intangible assets	Total
Cost					
Balance at 1 October 2015	8.1	40.5	–	306.1	354.7
Additions	–	–	–	45.8	45.8
Reclassifications	–	–	–	6.7	6.7
Effect of movements in exchange rates	–	1.3	–	(3.0)	(1.7)
Disposals	–	(5.4)	–	(12.4)	(17.8)
Balance at 30 September 2016	**8.1**	**36.4**	**–**	**343.2**	**387.7**
Amortisation and impairment losses					
Balance at 1 October 2015	2.2	1.9	–	104.8	108.9
Amortisation for the year	–	0.2	–	56.1	56.3
Impairment losses	–	5.4	–	2.0	7.4
Effect of movements in exchange rates	–	–	–	(0.9)	(0.9)
Reclassification	–	–	–	2.3	2.3
Disposals	–	(5.4)	–	(11.4)	(16.8)
Balance at 30 September 2016	**2.2**	**2.1**	**–**	**152.9**	**157.2**
Net book value at 30 September 2016	**5.9**	**34.3**	**–**	**190.3**	**230.5**

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

USD'M	Goodwill	Licences	Mineral rights	Other intangible assets	Total
Cost					
Balance at 1 October 2014	2.2	14.1	420.5	276.4	713.2
Acquisitions through business combinations	–	–	–	1.0	1.0
Additions	5.9	41.0	–	79.5	126.4
Reclassifications	–	2.3	(56.6)	(41.0)	(95.3)
Effect of movements in exchange rates	–	(12.4)	–	(1.5)	(13.9)
Disposals	–	(4.5)	–	–	(4.5)
Divestments of subsidiaries	–	–	(363.9)	(8.3)	(372.2)
Balance at 30 September 2015	**8.1**	**40.5**	**–**	**306.1**	**354.7**
Amortisation and impairment losses					
Balance at 1 October 2014	2.2	3.1	84.5	90.3	180.1
Amortisation for the year	–	0.2	5.8	46.0	52.0
Impairment losses	–	1.2	20.0	1.5	22.7
Reclassification	–	0.5	(60.9)	(22.8)	(83.2)
Disposals	–	(3.1)	–	–	(3.1)
Divestments of subsidiaries	–	–	(49.4)	(10.2)	(59.6)
Balance at 30 September 2015	**2.2**	**1.9**	**–**	**104.8**	**108.9**
Net book value at 30 September 2015	**5.9**	**38.6**	**–**	**201.3**	**245.8**

Goodwill is the only intangible asset with an indefinite life. All other intangible assets are amortised as follows:

- Licence fees paid are amortised evenly over their respective periods, for which the licences have been granted, generally not exceeding 10 years;
- Other intangible assets are amortised evenly over their estimated useful economic life. Other intangibles mainly consist of software, payments made under exclusivity contracts with clients for petroleum fuels and lubricants and exploration costs.

Amortisation expenses and impairment charges are included in general and administrative expenses.

Intangible assets with finite lives are tested for impairment when impairment indicators exist. Goodwill is tested for impairment annually either individually or at the cash-generating unit (CGU) level. Annually, development costs are evaluated on a project-by-project basis by reviewing current status and project details.

For the purpose of impairment testing, goodwill is allocated to the CGUs, or groups of CGUs.

In 2015, during the regular assessment of whether there was an indication of asset impairment or whether a previously recorded impairment may no longer be required, the evaluation of projects and forecasts and mining assets resulted in impairment charges of USD20 million in relation to mining licences/mineral rights in the Central Africa Region.

13. EQUITY-ACCOUNTED INVESTEES

	2016 USD'M
1 October 2015	**3,167.5**
Effect of movements in exchange rates	**(42.5)**
Additions	**553.9**
Disposals	**(44.1)**
Impairments	**(250.0)**
Share of net income/(loss)	**94.3**
Dividends received	**(13.7)**
Other	**(1.0)**
30 September 2016	**3,464.4**

The Group's share of profit in its equity-accounted investees for the year was a gain of USD94.3 million (2015: USD87.8 million).

In 2016, the Group received dividends of USD13.7 million from its investments in equity-accounted investees (2015: USD25.8 million).

In October 2015, Trafigura made an additional capital contribution of USD275 million in Puma Energy Holdings Pte Ltd. to enable further growth. During 2016, the company invested USD141.6 million in a copper smelting company in China. In February 2016, Trafigura subscribed to the rights offering by Nyrstar N.V. allowing it to increase its investment in Nyrstar N.V. by USD70 million. Also during 2016 Trafigura made an additional investment of USD36.9 million in PT Servo Meda Sejahtera, a coal trading partner located in Indonesia.

The reduction in equity accounted investees in 2016 was as a result of the sale of a minor stake in Puma Energy Holding Pte Ltd. of USD41.8 million. Besides that an impairment of USD250.0 million was made on Trafigura's equity investment in Porto Sudeste, as described below.

During the regular assessment to determine asset impairment or whether a previously recorded impairment may no longer be required, the Group decided that due to the continued low iron ore price environment, strong competition on logistics fees and low international freight rates, that an impairment of USD250.0 million in relation to Trafigura's investment in Porto Sudeste do Brasil SA was required. Impairment exists when the carrying value of an asset or CGU exceeds its recoverable amount, which the company has defined as the higher of value in use and fair value less costs of disposal. As the majority of the specific assets related to Porto Sudeste do not have independent associated cash flows, Porto Sudeste represents one CGU. The recoverable amount of the property, plant, and equipment were measured based on value in use, determined using the discounted cash flow technique (level 3), where possible, market forecasts and assumptions discounted using operation specific discount factors. Discount rates used in determining the value in use were 12.6% (2015: 12.6%). The recoverable amount of the CGU was determined to be USD254 million. The value-in-use methodology inherently includes elements of judgement and estimations; including in relation to future throughput volumes and associated terminal rates. Management has made these judgements based on their best estimates and the information available. The sensitivity analyses on the valuations show that an increase/decrease in the discount rate of 0.5% has an impact on our valuation of minus USD95 million/plus USD102 million. A change in the throughput volume of the Port of 5% causes a change of USD28 million to the valuation and a change of the terminal rates of 5% has an impact of USD90 million.

Name	Place of incorporation/ registration	Activities	Percentage of equity attributable to the Group 2016	Percentage of equity attributable to the Group 2015
Buckeye Texas Partners LLC	United States	Terminalling	20.0%	20.0%
Empresa Minera del Caribe S.A.	Caribbean	Mining	49.0%	49.0%
Guangxi Jinchuan Nonferrous Metals Co., Ltd	China	Smelter	30.0%	–
Napoil Limited	Bermuda	Oil trading	49.0%	49.0%
Osmunda Limited	Isle of Man	Oil trading	–	33.0%
Porto Sudeste do Brasil S.A. (joint venture)	Brazil	Port services	47.4%	47.3%
PT Servo Meda Sejahtera	Indonesia	Coal trading	46.5%	40.0%
Puma Energy Holdings Pte. Ltd.	Singapore	Mid- and downstream oil activities	49.6%	48.6%
Transportadora Callao S.A.	Peru	Transportation	30.0%	30.0%
ATALAYA MINING PLC (previously known as EMED MINING PUBLIC LIMITED)	Cyprus	Mining	22.0%	22.0%
Nyrstar N.V.	Belgium	Mining, Metal processing	24.6%	23.7%
TM Mining Ventures, S.L. (joint venture)	Spain	Mining	50.0%	50.0%

Name	Segment	2016 USD'M	2015 USD'M
Oil and Petroleum:			
Puma Energy Holdings Pte. Ltd.	Oil and Petroleum	**2,059.8**	1,819.7
Buckeye Texas Partners LLC	Oil and Petroleum	**276.0**	260.9
Napoil Limited	Oil and Petroleum	**8.7**	8.7
Osmunda Limited	Oil and Petroleum	**–**	1.4
Others	Oil and Petroleum	**1.1**	1.1
	Total	**2,345.6**	**2,091.8**
Metals and Minerals:			
TM Mining Ventures, S.L. (MATSA)	Metals and Minerals	**407.3**	422.2
Porto Sudeste do Brasil S.A.	Metals and Minerals	**256.1**	377.5
Nyrstar N.V.*	Metals and Minerals	**161.9**	165.3
Guangxi Jinchuan Nonferrous Metals Co., Ltd		**141.7**	–
ATALAYA MINING PLC (previously known as EMED MINING PUBLIC LIMITED)*	Metals and Minerals	**53.8**	55.8
PT Servo Meda Sejahtera	Metals and Minerals	**56.2**	23.3
Empresa Minera del Caribe S.A.	Metals and Minerals	**16.8**	16.8
Transportadora Callao S.A.	Metals and Minerals	**8.7**	10.5
Others	Metals and Minerals	**6.9**	3.1
	Total	**1,109.4**	**1,074.5**
All other segments:			
Others	Corporate and Others	**9.4**	1.2
	Total	**9.4**	**1.2**
Total		**3,464.4**	**3,167.5**

*** Listed investments. Fair value as at 30 September 2016 based upon level 1 valuation:**

Nyrstar N.V.	168.7
ATALAYA MINING PLC (previously known as EMED MINING PUBLIC LIMITED)	28.8

Individually significant associate Puma Energy Holdings Pte. Ltd. is shown separate from the other associates.

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

Puma Energy Holdings Pte. Ltd.

	2016 USD'M	2015 USD'M
Non-current assets	**5,019.1**	4,645.4
Current assets	**2,070.9**	2,069.6
Non-current liabilities	**2,916.8**	2,545.6
Current liabilities	**2,273.0**	2,634.0
The above assets and liabilities include:		
Cash and cash equivalents	**474.0**	281.2
Current financial liabilities	**475.0**	645.6
Revenue	**12,725.6**	12,567.6
Profit/(loss) for the year	**120.4**	187.5
Dividends paid	**–**	17.0
Other comprehensive income	**(109.7)**	(484.2)
Total comprehensive income	**10.7**	(296.8)
Net assets	**1,900.3**	1,535.4
Trafigura's ownership interest	**49.6%**	48.6%
Acquisition fair value and other adjustments	**1,117.3**	1,074.1
Carrying value	**2,059.8**	1,819.7

Other equity accounted investees

Other associates	2016 USD'M	2015 USD'M
Assets	**4,683.4**	3,685.8
Liabilities	**3,335.6**	2,502.5
Revenue	**1,484.2**	762.1
Profit/(loss) for the year	**33.9**	(2.8)

14. PREPAYMENTS

Under the prepayments category we account for the prepayments of commodity deliveries. The contractually outstanding prepayments amount decreases in size with each cargo that is delivered, until maturity. Once the contractually agreed total cargo has been fully delivered, the prepayment agreement falls away leaving no remaining contractual obligations on Trafigura or the supplier. As the economic benefit of the prepayments is the receipt of goods rather than the right to receive cash or another financial asset, the prepayments are not classified as a financial asset under IFRS. The Company monitors the commodity prices in relation to the prepayment contracts and manages the credit risk together with its financial assets as described in Note 27. The prepayments are split in non-current prepayments (due > 1 year) and current prepayments (due < 1 year). A portion of the long-term prepayments, as well as short-term prepayments, is on a limited recourse basis. Interest on the repayments is added to the prepayments balance.

15. LOANS RECEIVABLE

	2016 USD'M	2015 USD'M
Loans to associates and related parties	**433.9**	251.8
Other non-current loans receivable	**367.4**	188.3
Total	**801.3**	440.1

Loans to associates and related parties consist of a shareholder loan receivable from Minas de Aguas Teñidas (MATSA) of USD251.8 million (2015: USD251.8 million). This loan is held to collect contractual cash flows and generates a fixed income for the Group. Also included under this line is a loan receivable from Empressa Minera del Caribe S.A. of USD140.0 million (2015: USD54.0 million under other non-current loans receivable).

In determining the impairment provision of these loans, the Group included the amount of the loans in the invested amounts in these companies under equity accounted investees. The impairment assessment of these investments has been performed on the total investments including loans issued. Based on these assessments no impairment needs to be recorded at 30 September 2016.

Other non-current loans receivable includes various loans which are granted to counterparties with which Trafigura trades. This line also includes the long-term portion (USD280.9 million) of the debt agreement with the Angolan Ministry of Finance which is further described in Note 6. Considering the diversity of these loans, Trafigura decided to assess the Expected Credit Loss ('ECL') of these loans individually based on different scenarios of probability of default ('PD') and loss given default ('LGD'). Based upon the individual analysis of these loans, the recorded expected losses on these loans amount USD2.5 million (2015: USD nil).

The Group also assessed whether the present value of the outstanding amounts assuming on time receipt, is significantly higher than the present value of the receivables that are past due. This difference was concluded to be insignificant.

16. OTHER INVESTMENTS

	2016 USD'M	2015 USD'M
Listed equity securities – Fair value through OCI	**97.6**	145.3
Listed debt securities – Fair value through profit or loss	**327.0**	528.3
Unlisted equity investments – Fair value through profit and loss	**59.4**	71.2
Unlisted equity investments – Fair value through OCI	**56.3**	64.4
Total	**540.3**	809.2

The Group's long-term investments consist of listed equity securities, listed debt securities and unlisted equity securities. The listed equity securities have no fixed maturity or coupon rate. The fair values of listed equity investments are based on quoted market prices while the fair value of the unlisted equity securities is determined based on a Level 3 valuation as prepared by management.

The decrease in other investments is mainly due to the sale of the listed Pacific Exploration and Production shares (USD73.3 million), the partial sale of the debt instrument related to Porto Sudeste (USD91.7 million) and downward valuation of USD125.9 million based upon level 3 valuation of the same debt instruments.

The listed debt securities consist of a financial instrument related to the investment in Porto Sudeste do Brasil SA which is accounted for under equity accounted investees in Note 13. These instruments are held to collect cash flows. Since the payments on these debt instruments are dependent on the port's throughput, they are classified as fair value through profit or loss. Since the free float of these listed debt instruments is extremely thin and in the absence of normal market activity, it has been concluded that no active market exists and therefore the fair value is determined using a level 3 valuation. The holders of the instrument will be directly dependent on the business risk of Porto Sudeste. Therefore the fair value of this instrument is based on a discounted cash flow calculation using the business plan of Porto

Sudeste. Revenues are calculated over a period ending in 2064 and are held constant from 2022 onwards. In this calculation management used a discount rate of 12.6% (2015: 12.6%). Due to the limited liquidity of the port asset, a discount factor of 26% is applied (2015: 38%) relating to the lack of marketability. This input is based on a put option model and volatilities of comparable companies. Due to the adjustments made in the projections of the throughput of the Port in 2016, an impairment has been recorded on our investment in Porto Sudeste (see Note 13). As a consequence, the level 3 valuation of the debt securities also decreased which led to a downward valuation on the debt securities of USD125.9 million. The sensitivity analysis on this valuation shows that an increase/decrease of the discount rate by 0.5% has an impact on our valuation of USD23 million. A change in the discount due to lack of marketability by 5% has an effect of USD21 million on the valuation.

Throughout the financial year, no dividend has been recognised related to the equity securities held at 30 September 2016. The net change in fair value in equity securities measured at fair value through other comprehensive income ('OCI') was negative USD31.7 million (2015: negative USD91.9 million). A cumulative loss of USD66.0 million (2015: USD52.1 million) was transferred within equity from OCI to retained earnings due to disposals and the reclassification of items to equity-accounted investees.

17. INVENTORIES

Carrying amount	2016 USD'M	2015 USD'M
Storage inventories	**7,069.1**	4,961.4
Floating inventories	**4,455.7**	2,633.8
Supplies	**12.9**	19.2
Total	**11,537.7**	7,614.4

As at 30 September 2016 (and 30 September2015) all of the inventory has either been pre-sold or hedged. The Group is committed to financing its day-to-day trading activity through self-liquidating transactional lines, whereby the financing banks retain security on the goods purchased. The percentage of total inventories financed in this way is carefully monitored.

18. TRADE AND OTHER RECEIVABLES

	2016 USD'M	2015 USD'M
Trade debtors	**6,725.7**	5,787.4
Provision for bad and doubtful debts	**(56.6)**	(43.5)
Accrued turnover	**5,403.7**	4,554.2
Broker balances	**1,212.1**	380.9
Other debtors	**333.2**	851.3
Loans to third parties	**217.3**	694.1
Loans to related parties	**104.2**	284.4
Other taxes	**222.5**	193.7
Prepaid expenses	**147.2**	165.4
Related parties	**890.6**	1,034.4
Total	**15,199.9**	13,902.3

All financial instruments included in trade and other receivables are held to collect the contractual cash flows. Furthermore, the cash flows that the Group receives on these instruments are solely payments of principal and interest.

Of the USD6,725.7 million trade debtors, USD1,516.0 million (2015: USD1,038.8 million) had been sold on a non-recourse basis under the securitisation programme. Refer to Note 19. As at 30 September 2016, 17.7% (2015: 14.6%) of receivables were between 1-60 days overdue, and 17.8% (2015: 11.9%) were greater than 60 days overdue. Most of the overdue amounts are related to state owned counterparties. Such receivables, although contractually past their due dates, are not considered impaired as there has not been a significant change in credit quality of the relevant counterparty, and the amounts are still considered recoverable taking into account customary payment patterns and in many cases, offsetting accounts payable balances. Trafigura applied the simplified method in assessing expected credit losses. The accounts receivables have been divided in aging buckets and based on a historical analysis on defaults and recovery rates a percentage for expected credit losses has been determined. Trafigura manages to limit credit losses by renegotiating contracts in the case of a default. From the above analysis, an expected credit loss as at 30 September 2016 of USD5.9 million has been taken into account (30 September 2015: USD nil). The provision for doubtful debtors at 30 September 2016 amounts to USD56.6 million (2015: USD43.5 million). The primary character of this provision is that it is in line to resolve demurrage claims and commercial disputes with our clients. Accrued turnover represent receivable balances for sales which have not yet been invoiced. They have similar risks and characteristic as trade debtors. Trade debtors and accrued turnover have similar cashflow characteristics and are therefore considered to be a homogeneous group of financial assets.

19. SECURITISATION PROGRAMME

The Group operates a Securitisation Programme which enables the Group to sell eligible receivables. The securitisation vehicle, Trafigura Securitisation Finance plc., is consolidated as part of the Group and consequently the receivables sold to the programme are included within the consolidated trade debtor balances.

Over time the external funding has increased significantly in size while incorporating a longer term committed funding element, principally through the issuance of Medium Term Notes (MTN), as well as retaining a significant proportion of variable funding purchased by bank sponsored conduits.

As at 30 September 2016, the maximum available amount of external funding of the programme was USD1,888 million (2015: USD2,133 million). The utilised external funding of the programme as at 30 September 2016 was USD1,485 million (2015: USD1,258 million).

The available external funding of the securitisation programme consists of:

	Interest rate	Maturity	2016 USD'M	2015 USD'M
AAA MTN	Libor + 0.95%	2017 – October	**279.0**	279.0
BBB MTN	Libor + 2.25%	2017 – October	**21.0**	21.0
AAA VFN	See note below	Various throughout the year	**1,425.4**	1,644.3
BBB VFN	See note below	Various throughout the year	**107.2**	123.4
Senior subordinated debt	Libor + 4.25%	2017 – March	**55.4**	65.7
Total			**1,888.0**	2,133.4

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

a. Interest rate note

The rate of interest applied to the AAA Variable Funding Notes is defined in the securitisation facility documentation and is principally determined by the demand for Commercial paper issued by six bank-sponsored conduits. The Group benchmarked the rate provided against overnight Libor. In the case of the rate of interest applicable to the BBB Variable Funding Notes, the rate of interest is principally determined by the liquidity of the interbank market.

b. Maturity note

The maturity of the AAA Variable Funding Notes has been staggered so as to diversify the maturity profile of the AAA funding. This aims to mitigate the 'liquidity wall' risk associated with a single maturity date for a significant funding amount.

20. CASH AND CASH EQUIVALENTS

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for varying periods of between one day and three months depending on the immediate cash requirements of the Group and earn interest at the respective short-term deposit rates. The fair value of cash and cash equivalents approximates the carrying value. An amount of USD43.1 million (2015: USD34.0 million) of cash at bank is restricted and can be collected when fixed asset construction invoices are presented to the banks.

	2016 USD'M	2015 USD'M
Cash at bank and in hand	**2,786.4**	3,116.1
Short-term deposits	**355.5**	418.1
Total	**3,141.9**	3,534.2

As at 30 September 2016, the Group has USD8.0 billion (2015: USD7.8 billion) of committed revolving credit facilities of which USD3.2 billion (2015: USD3.2 billion) remained unutilised. The Group had USD2.0 billion (2015: USD1.8 billion) of immediately (same day) available cash in liquidity funds. The Group had immediate access to available liquidity balances from liquidity funds and corporate facilities in excess of USD5.2 billion (2015: USD4.9 billion). Short-term deposits made for periods longer than three months are separately shown in the statement of financial position and earn interest at the respective short-term deposit rates.

21. CAPITAL AND RESERVES

a. Share capital

As at 30 September 2016 the company has 25,000,000 ordinary shares outstanding and a capital of USD1,504 million. During 2016 no changes took place in the outstanding share capital.

The holders of ordinary shares are entitled to receive dividends as and when declared by the Company. All ordinary shares carry one vote per share without restriction. The ordinary shares have no par value.

b. Capital contribution reserve

The capital contribution reserve relates to share capital and share premium of investments in subsidiaries contributed by the parent company to the Company. The contributions of these subsidiaries qualified as transactions under common control and have been accounted for under the pooling method of accounting. Under the pooling method of accounting the subsidiaries contributed have been consolidated in the Company's financial statements as if they were included in the Company's group structure as at the opening balance sheet of 1 October 2013. At the date of actual contribution by the parent company to the Company, any amount paid in excess of the carrying value of the subsidiary at the date of transfer has been recorded as a reduction in retained earnings. In 2016 an adjustment was made on the 2015 acquisitions of subsidiaries from the parent company of USD6.5 million.

c. Capital Securities

As part of the financing of the Company and its subsidiaries, the Company has taken over two capital securities instruments from its immediate parent Trafigura Beheer B.V. at the carrying value of USD640.6 million with a par value of SGD200 million and USD500 million. This substitution of issuer and subsequent transfer is in accordance with the trust deed of the SGD200 million and USD500 million capital securities.

The SGD200 million capital security was originally issued in February 2014. The distribution on the security is 7.5% and is listed on the Singapore Stock Exchange. The capital security may be redeemed at the Company's option in whole, but not in part, on the distribution payment date in February 2019 or any distribution date thereafter on not less than 30 and not more than 60 days' notice to the holders.

The USD500 million capital security was originally issued on 19 April 2013. The distribution on the capital security is 7.625% per annum and it is listed on the Singapore Stock Exchange. The capital security may be redeemed at the Company's option in whole, but not in part, on the distribution payment date in April 2018 or any distribution date thereafter on not less than 30 and not more than 60 days' notice to the holders.

The securities are perpetual in respect of which there is no fixed redemption date. The distribution on the capital securities is per annum, payable semi-annually in arrears every six months from the date of issue. The company may elect to defer (in whole but not in part) any distribution in respect of these capital securities.

In the event of a winding-up, the rights and claims of the holders in respect of the capital securities shall rank ahead of claims in respect of the Company's shareholders, but shall be subordinated in right of payment to the claims of all present and future unsubordinated obligations, except for obligations of the Company that are expressed to rank pari passu with, or junior to, its obligations under the capital securities.

According to the trust deed obligations of the Substitute under the Securities and the Coupons shall be unconditionally and irrevocably guaranteed by Trafigura Group Pte. Ltd.

d. Currency translation reserve

The currency translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as from the translation of liabilities that hedge the Company's net investment in a foreign operation.

e. Revaluation reserve

The revaluation reserve comprises the fair value measurements movements of the equity investments which are accounted for at fair value through other comprehensive income. On realisation of these gains or losses, for example the sale of an equity instrument, the cumulative amounts of this reserve are transferred to retained earnings. Included in the revaluation reserve is a loss of USD23.0 million (2015: USD57.3 million) related to the mark to market valuation of equity investments.

f. Cash flow hedge reserve

Included in the cash flow hedge reserve is a gain of USD14.1 million (2015: USD27.8 million loss) related to the effective portion of the changes in fair value of cash flow hedges, net of tax.

g. Retained earnings

Retained earnings comprise the share-based payment reserves and revaluation reserves.

h. Dividends

The value of the dividends declared on the ordinary shares amounts to USD719.1 million representing USD28.8 per share.

22. MATERIAL PARTLY-OWNED SUBSIDIARIES

Financial information of subsidiaries that have material non-controlling interest is provided below. The information is based on amounts before intercompany eliminations.

The Company has control over DTS Holdings Pte Ltd with a 50% equity interest (2015: 50%). DTS Holdings PTE Ltd is a business venture between Trafigura and Cochan and is the main holding company of the DT Group. The DT Group's activities span trading, shipping, infrastructure, asset management, logistics and mining. Summarised statement of income:

	2016 USD'M	2015 USD'M
Revenue	**1,617.7**	3,876.2
Cost of sales	**(1,533.4)**	(3,725.2)
General and administrative expenses	**(18.2)**	(33.0)
Other income/expense	**263.4**	(244.3)
Net financing income/expense	**8.9**	(3.6)
Profit/(loss) before tax	**338.4**	(129.9)
Income tax expense	**(2.1)**	(7.1)
Profit/(loss) for the period	**336.3**	(137.0)
Attributable to non-controlling interest	**226.4**	(124.0)

The OCI related to non-controlling interest is disclosed in the consolidated statement of changes in equity.

During 2016, DTS Holdings Pte. Ltd. paid no dividend (2015: USD200 million).

Summarised statement of financial position as at 30 September:

	2016 USD'M	2015 USD'M
Total non-current assets	**428.7**	267.6
Total current assets	**1,659.6**	1,524.5
Total non-current liabilities	**(5.5)**	(9.1)
Total current liabilities	**(1,494.5)**	(1,534.6)
Total equity	**588.3**	248.4
Attributable to		
Non-controlling interests	**292.3**	65.8
Owners of the Company	**296.0**	182.6

23. LOANS AND BORROWINGS

This note provides information about the contractual terms of the Group's interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group's exposure to interest rate, foreign currency and liquidity risk, see Note 27.

Carrying value of loans and borrowings	2016 USD'M	2015 USD'M
Non-current		
Revolving credit facilities	**3,960.0**	4,160.0
Private placements	**331.0**	331.0
Eurobond	**1,231.7**	1,296.6
Other loans	**1,685.0**	1,469.5
Finance leases	**26.5**	32.6
Total non-current	**7,234.2**	7,289.7
Current		
Revolving credit facilities	**685.0**	215.0
Private placements	**–**	44.0
Other loans	**364.6**	335.4
Finance leases	**12.3**	16.2
Short-term bank borrowings	**16,971.1**	14,057.6
Total current	**18,033.0**	14,668.2
Total	**25,267.2**	21,957.9

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

a. Terms and debt repayment schedule

Terms and conditions of outstanding loans were as follows:

	Principal	Interest	Maturity	Floating/fixed rate debt	0-1 year USD'M	1-5 years USD'M	> 5 years USD'M	Total USD'M
Revolving credit facilities								
USD	3,190.0	Libor + 0.85%	2019 – March	Floating	–	2,810.0	–	**2,810.0**
USD	1,910.0	Libor + 0.65%	2017 – March	Floating	250.0	–	–	**250.0**
USD	435.0	Libor + 1.70%	2016 – October	Floating	435.0	–	–	**435.0**
USD	435.0	Libor + 1.30%	2017 – October	Floating	–	435.0	–	**435.0**
USD	625.0	Libor + 1.10%	2018 – October	Floating	–	625.0	–	**625.0**
USD	90.0	Libor + 2.35%	2018 – October	Floating	–	90.0	–	**90.0**
					685.0	3,960.0	–	**4,645.0**
Private placements								
USD	88.0	6.50%	2018 – April	Fixed	–	88.0	–	**88.0**
USD	98.0	7.11%	2021 – April	Fixed	–	98.0	–	**98.0**
USD	36.0	4.38%	2018 – March	Fixed	–	36.0	–	**36.0**
USD	51.5	4.89%	2020 – March	Fixed	–	51.5	–	**51.5**
USD	57.5	5.53%	2023 – March	Fixed	–	–	57.5	**57.5**
					–	273.5	57.5	**331.0**
Eurobonds								
EUR	593.0	5.25%	2018 – November	Fixed	–	669.0	–	**669.0**
EUR	500.8	5.00%	2020 – April	Fixed	–	562.7	–	**562.7**
					–	1,231.7	–	**1,231.7**
Other loans								
USD	279.0	Libor + 0.95%	2017 – October	Floating	–	279.0	–	**279.0**
USD	21.0	Libor + 2.25%	2017 – October	Floating	–	21.0	–	**21.0**
USD	150.0	Libor + 2.65%	2020 – September	Floating	21.5	107.9	–	**129.4**
USD	200.0	Libor + 3.15%	2022 – March	Floating	12.3	153.1	7.1	**172.5**
USD	55.5	Libor + 4.25%	2017 – March	Floating	55.5	–	–	**55.5**
JPY	50,500.0	Libor + 1.0%	2019 – March	Floating	–	498.3	–	**498.3**
USD	200.0	6.33%	2036 – July	Fixed	5.3	23.1	171.7	**200.1**
EUR	150.0	Euribor + 0.9%	2017 – January	Floating	167.7	–	–	**167.7**
EUR	200.0	5.50%	2020 – July	Fixed	–	224.7	–	**224.7**
USD	30.0	Libor + 3.25%	2018 – March	Floating	–	30.0	–	**30.0**
USD	60.0	Libor + 1.6%	2017 – March	Floating	47.3	–	–	**47.3**
USD	120.0	Libor + 4%	2021 – August	Floating	20.0	80.0	5.0	**105.0**
MXN	415.7	Libor + 5.70%	2023 – June	Floating	3.2	14.1	5.7	**23.0**
USD	39.6	Libor + 2.95%	2019 – October	Floating	3.5	21.3	–	**24.8**
Various					28.4	41.0	1.9	**71.3**
					364.7	1,493.5	191.4	**2,049.6**
Finance leases					12.3	26.5	–	**38.8**
Total					**1,062.0**	**6,985.2**	**248.9**	**8,296.1**

For long-term assets pledged under loans and borrowings agreements, refer to Note 11 (Property, plant and equipment).

Finance lease commitments are principally for machinery and equipment. Original terms range from two years to five years, some containing renewal options.

At the time of entering into finance lease agreements, the commitments are recorded at their present value using the interest rate then applicable for long-term funding. At 30 September 2016, existing finance lease commitments are recorded at the remaining present value using the interest rate applied at commencement of the lease.

24. PROVISIONS

The carrying amount of provisions made is as follows:

Carrying amount of provisions	2016 USD'M	2015 USD'M
Opening balance 1 October	**83.9**	23.9
Additions	**7.1**	74.5
Amount charged against provisions	**(10.5)**	(0.8)
Unwinding of discount	**0.4**	3.9
Remeasurements and other movements	**(11.6)**	(1.1)
Divestments of subsidiaries	**–**	(16.5)
Closing balance 30 September	**69.3**	83.9
Non-current portion	**13.3**	9.8
Current portion	**56.0**	74.1
Closing balance 30 September	**69.3**	83.9

Provisions consist of Decommissioning, rehabilitation and restoration USD10.9 million (2015: USD10.0 million), Litigation, disputes USD45.5 million (2015: USD45.5 million), Onerous contracts USD5.0 million (2015: USD20.0 million) and others USD7.9 million (2015: USD8.4 million).

Provisions for decommissioning, rehabilitation and restoration costs are recognised due to the environmental commitment the Group has made with local authorities and for its obligations to undertake site reclamation and remediation in connection with its mining activities. Provisions for litigation and disputes at 30 September 2016, relate to two situations connected with the Company's trading and storage activities in China. Further information is presented in Note 26. Under the Onerous contracts the wind up of some long-term lease contracts are accounted for as well as onerous capital expenditure commitments. The expected outflow of resources is mainly to happen within one year.

25. TRADE AND OTHER PAYABLES

	2016 USD'M	2015 USD'M
Trade creditors	**2,100.3**	2,368.1
Accrued costs of sales and expenses	**6,825.4**	6,593.6
Broker balances	**18.3**	520.8
Related parties	**8.5**	3.8
Total	**8,952.5**	9,486.3

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in Note 27.

26. CONTINGENCIES AND COMMITMENTS

The following contingent liabilities exist in respect of trade financing:

	2016 USD'M	2015 USD'M
Letters of credit	**4,702.3**	3,840.7
Guarantees	**312.7**	151.8
Total	**5,015.0**	3,992.5

The Company and its subsidiaries are parties to a number of legal claims and proceedings arising out of their business operations. The Company believes that the ultimate resolution of these claims and proceedings will not, in the aggregate, have a material adverse effect on The Company's financial position, consolidated income or cash flows. Such legal claims and proceedings, however, are subject to inherent uncertainties and the outcome of individual matters is unpredictable. It is possible that the Company could be required to make expenditures, in excess of established provisions, in amounts that cannot reasonably be estimated.

As reported in the press, at certain warehouses in China, notably for the Company at Qingdao, Pinglai and Yingkou, there have been rumours that fraudulent warehouse certificates are in circulation. The Company's subsidiary Impala has issued warehouse certificates, and also has a limited number of collateral management agreements in place, regarding metal stored at these locations. The position remains that it has not been possible to independently verify the quantity and ownership of the metal stored at these locations and consequently legal proceedings have been commenced in England and China relating to ownership of the metal and potential liabilities regarding the storage arrangements. In view of the uncertainties surrounding (a) the volume of material in the warehouses; (b) its correct ownership; and (c) the approach the majority of the customers will ultimately take, it remains premature to speculate on Impala's likely net total exposure in relation to this matter. Looking at hypothetical yet realistic scenarios, it is considered unlikely that a potential liability for Impala would be material for the Group.

The Company has a potential financial exposure resulting from certain oil trading and risk management activities of its counterparty's representative. These activities are the subject of on-going actions, claims and disputes against the Company. The underlying circumstances regarding these actions, claims and disputes are complex and opaque and consequently how these disputes and actions will be resolved is uncertain.

Guarantees include guarantees to trading partners in the normal course of the business. In addition the Company has given a financial guarantee on the full recourse tranches of the syndicated bank facility held by Trafigura Investment Sarl. This company holds a USD1 billion prepayment facility in favour of Rosneft which was syndicated with a pool of international banks. The shares of Trafigura Investment Sarl are held by an independent Foundation incorporated in the Netherlands in which Trafigura has no control and thus has been deconsolidated since 30 September 2014. The maximum exposure under this guarantee as of 30 September 2016 amounted to USD285 million (2015: USD300 million). The expiry of this guarantee is September 2018.

The Company had outstanding commitments at the end of 30 September 2016 and 30 September 2015 as follows:

	2016 USD'M	2015 USD'M
Storage rental	**2,731.5**	2,759.0
Time charters	**1,133.3**	1,176.8
Office rent	**122.8**	156.1
	3,987.6	4,091.9
Assets under construction	**378.4**	671.0
Total	**4,366.0**	4,762.9

Non-cancellable operating lease rentals are payable as follows:

	2016 USD'M	2015 USD'M
Less than one year	**1,222.3**	1,210.2
Later than one year and less than five years	**2,340.6**	2,302.6
Later than five years	**424.7**	579.1
Total	**3,987.6**	4,091.9

Amount under Assets under construction includes an amount of USD236.5 million (2015: USD421.5 million) as commitments for vessels under construction.

27. FINANCIAL INSTRUMENTS

a. Financial risk management

The Group is exposed to a number of different financial risks arising from normal business exposures as well as its use of financial instruments including: market risks relating to commodity prices, foreign currency exchange rates and interest rates; credit risk; and liquidity risk.

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

Prudently managing these risks is an integral element of Trafigura's business and has been institutionalised since the Group's foundation. Risk management guidelines are established at senior management level. The various risks the Group is exposed to are managed through a combination of internal procedures, such as strict control mechanisms and policies, as well as external third parties such as the derivative, insurance and bank markets. As a rule, Trafigura actively manages and lays off where possible a large majority of the risks inherent to its activity. Trafigura's conservative risk management process is designed to:

- Provide a full and accurate awareness of risks throughout the Group.
- Professionally evaluate and monitor these risks through a range of risk metrics.
- Limit risks via a dynamic limit setting framework.
- Manage risks using a wide range of hedging instruments and strategies.
- Ensure a constant dialogue between trading desks, risk managers and senior management.

The three main, reinforcing, components of Trafigura's risk management process are the Chief Risk Officer (CRO), the Risk Committee, and the trading teams.

The Chief Risk Officer is independent of the revenue-producing units and reports to the Chief Operating Officer and the Board of Directors. The CRO has primary responsibility for assessing and monitoring Trafigura's market risks. The CRO's team liaises directly with the trading teams to analyse new opportunities and ensures that risk assessments adapt to changing market conditions. The CRO's team also ensures Trafigura's risk management capabilities incorporate ongoing advances in technology and risk management modelling capabilities.

The Risk Committee, which is comprised of members of the Board of Directors and the Chief Risk Officer is responsible for applying Trafigura's risk management capabilities towards improving the overall performance of the Group. In 2016, the Risk Committee met weekly to discuss and set risk and concentration limits, review changing market conditions, and analyse new market risks and opportunities.

Trafigura's trading teams provide deep expertise in hedging and risk management in the specific markets each team operates in. While the trading teams have front line responsibility for managing the risks arising from their activities, our process ensures a strong culture of escalation and accountability, with well-defined limits, automatic notifications of limit overages and regular dialogue with the CRO and Risk Committee.

b. Market risk

Market risk is the risk of loss in the value of Trafigura's positions due to changes in market prices. Trafigura holds positions primarily to ensure our ability to meet physical supply commitments to our customers, to hedge exposures arising from these commitments, and to support our investment activities. Our positions change due to changing customer requirements and investment opportunities. The value of our positions is accounted for at fair value and therefore fluctuates on a daily basis due to changes in market prices. Categories of market risk we are exposed to include:

- Commodity price risk results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, base metals, coal and iron ore.
- Currency rate risk results from exposures to changes in spot prices, forward prices and volatilities of currency rates.
- Interest rate risk results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, and credit spreads.
- Equity price risk results from exposures to changes in prices and volatilities of individual equities and equity indices.

Trafigura hedges a large majority of price risks arising from its activities. When there is a difference in the characteristics of available hedging instruments and the corresponding commodity price exposures, Trafigura remains exposed to a residual price risk referred to as basis risk. Dynamically managing the basis risk that arises from Trafigura's activities requires specialist skills and is a core focus of our trading and risk management teams.

Value at Risk

Value at Risk (VaR) is a statistical estimate of the potential loss in value of our positions and unsold in-transit material due to adverse market movements. Trafigura calculates VaR over a one-day time horizon with a 95% confidence level. We use an integrated VaR model which captures risks including commodity prices, interest rates, equity prices and currency rates. Trafigura's integrated VaR model facilitates comparison of VaR across portfolios comprised of a range of different risk exposures.

As of 30 September 2016, Trafigura's one day market risk VaR was USD4.5 million (2015: USD6.0 million). Average market risk VaR (1 day 95%) during the fiscal year was USD6.3 million compared to USD9.3 million in the previous fiscal year. Trafigura's Board has set a target of maintaining VaR (1 day 95%) below 1% of Group equity.

Trafigura is aware of the inherent limitations to VaR and therefore uses a variety of risk measures and risk management techniques to create a robust risk management process. Limitations of VaR include:

- VaR does not estimate potential losses over longer time horizons where the aggregate moves may be extreme.
- VaR does not take account of the liquidity of different risk positions and therefore does not estimate the losses that might arise if Trafigura liquidated large positions over a short period of time.
- VaR is based on statistical analysis of historical market data. If this historical data is not reflective of futures market prices movements, VaR may not provide accurate predictions of future possible losses.

Trafigura's VaR calculation covers its trading businesses in the crude oil, refined oil products, petrochemical, natural gas, metals, concentrates, coal, iron ore, and freight markets and assesses the open-priced positions which are those subject to price risk, including inventories of these commodities. Trafigura's VaR model is based on historical simulations, with full valuation of more than 5,000 market risk factors.

VaR is calculated based on simultaneously shocking these risk factors. More recent historical price data is more heavily weighted in these simulations, which enables the VaR model to adapt to more recent market conditions and improves the accuracy of our estimates of potential losses.

Trafigura's VaR model utilises advanced statistical techniques that incorporate the non-normal price dynamics that are an important feature of commodity markets. Our VaR model is continuously and automatically calibrated and back-tested to ensure that its out-of-sample performance adheres to well defined targets. In addition, our VaR model is regularly updated to ensure it reflects the current observed dynamics of the markets Trafigura is active in.

Trafigura has made a significant, ongoing investment in risk management systems, including a reporting system which automatically distributes customised risk reports throughout the Group on a daily basis. These reports provide up-to-date information on each team's risk using industry standard measures such as 95% and 99% Value at Risk and performance indicators such as Sharpe ratios.

All trading books have well defined VaR risk limits and management and the trading teams are automatically notified whenever a book nears its risk limit, as well as whenever a VaR overage occurs. In addition, Trafigura's Deals Desk Management Team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

For senior management, the daily reports provide a comprehensive view of Trafigura's risk, classified according to various risk factors. These reports emphasise the risk diversification created by the Group's varied activities and highlight any excessive risk concentrations.

c. Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument or physical contract fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

The Company has a formalised credit process with credit officers in the key locations around the world. Strict credit limits are set up for each counterparty on the basis of detailed financial and business analysis. These limits are constantly monitored and revised in light of counterparty or market developments and the amount of exposure relative to the size of the Group's balance sheet. The Company makes extensive use of the banking and insurance markets to cover any counterparty or country risks that are in excess of its credit limits.

The risk management monitoring and decision-making functions are centralised and make extensive use of the Company's integrated bespoke IT system. The Company conducts transactions with the following major types of counterparties:

- Physical commodity counterparties spread across the vertical chains for both oil and bulk, e.g. producers, refiners/smelters and end-users. Sales to investment grade and non-investment grade counterparties are made on open terms up to internally approved credit limits. Exposures above such limits are subject to payment guarantees.
- Payment guarantee counterparties, i.e. prime financial institutions from which the Company obtains payment guarantees.
- Hedge counterparties comprising a number of prime financial institutions and physical participants in the relevant markets. There is no significant concentration of risk with any single counterparty or group of counterparties. Collateral is obtained from counterparties when the Company's exposure to them exceeds approved credit limits. It is the Company's policy to have ISDA Master Agreements or ISDA-based Long-Form Confirmation Agreements in place with all hedging counterparties.

The Company trades in all major geographic regions. Where appropriate, guarantees, insurance and letters of credit are used to reduce payment or performance risk. The Company has gross credit exposure in locations across the world with a concentration in emerging markets. Most of this exposure is laid off with third parties while the Company retains between 10% to 20% on average of the individual exposures.

The Company's maximum exposure to credit risk, without considering netting agreements or without taking into account of any collateral held or other credit enhancements, is equal to the carrying amount of Trafigura's financial assets as indicated in the balance sheet plus the guarantees to third parties and associates. The Company's objective is to seek continued revenue growth while minimising losses incurred due to increased credit risk exposure.

The Group has amounts and guarantees outstanding related to countries that are impacted by sanctions currently imposed by the US and EU. The Group analysed the sanctions and exposures and concluded that these do not materially impact the Group's positions.

(i) Concentration of credit risk

Concentrations of credit risk exist when changes in economic, industry or geographical factors similarly affect the Company's counterparties whose aggregate credit exposure is significant in relation to the Company's total credit exposure. The carrying amount of financial assets represents the maximum credit exposure. The Company determines concentrations of credit risk by monitoring the country profile of its third-party trade receivables on an ongoing basis.

Trafigura has a diverse customer base, with no customer representing more than 5.3% (2015: 6.0%) of its revenues over the year ended 2016.

Refer to Note 18 for the aging of trade and other receivables at the reporting date that were not impaired.

(ii) Financial assets that are neither past due nor impaired

Trade and other receivables that are neither past due nor impaired are creditworthy debtors with good payment record with the Company. Cash and cash equivalents and derivatives that are neither past due nor impaired are placed with or entered into with reputable financial institutions or companies with high credit ratings and no history of default. The credit quality of trade and other receivables is assessed based on a strict credit policy. The Group has monitored customer credit risk, by grouping trade and other receivables based on their characteristics.

Based on the Group's monitoring of customer credit risk, the Group believes that, except as indicated above, no impairment allowance is necessary in respect of trade receivables not past due.

Financial assets that are either past due or impaired

Information regarding financial assets that are either past due or impaired is disclosed in Note 18 (Trade and other receivables).

(iii) Guarantees

The Group's policy is to provide financial guarantees only to wholly-owned subsidiaries. As part of the Group's ordinary physical commodity trading activities, Trafigura Group PTE Ltd. may act as guarantor by way of issuing guarantees accepting responsibility for subsidiaries' contractual obligations.

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

d. Liquidity risk

Liquidity risk is the risk that the Company is unable to meet its payment obligations when due, or that it is unable, on an on-going basis, to borrow funds in the market on an unsecured or secured basis at an acceptable price to fund actual or proposed commitments.

The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient cash and cash equivalents and ready sources of committed funding available to meet anticipated and unanticipated funding needs. Sound financial management with a focus on liquidity has been instrumental to the Group's success. The Company has demonstrated the ability to raise the appropriate types of financing to match the needs of the business and to tap various investor bases (e.g. syndicated loan markets, trade finance markets, bond markets, USPP, securitisation etc.), maturities and geographies.

The Company manages its treasury and liquidity risks maintaining a strong liquidity position through the following:

- Targeting immediately-available cash on hand of minimum USD500 million under normal conditions (higher in the case of extreme volatility);
- Maintaining bilateral lines which allow the Group to mark-to-market financings to the value of the underlying physical assets. Mark to market financing is performed weekly (or intra-weekly in the case of extreme volatility) and provides an additional source of liquidity which is not available to competitors which are financed purely from revolving credit facilities;
- Committed unsecured credit facilities;
- Maintaining headroom under bilateral trade finance lines and committed revolving credit facilities ; and
- Limited distribution of profit (significant retained earnings) and subordination of repurchased equity.

The Group provided a financial guarantee for an amount of USD285 million as of 30 September 2016 (2015: USD300 million) that will expire in 2018.

The maturity analysis of the Groups financial liabilities based on the contractual terms is as follows:

	Total USD'M	0-1 years USD'M	1-5 years USD'M	> 5 years USD'M
30 September 2016				
Financial liabilities				
Current and non-current loans and borrowings	**25,267.2**	18,033.0	6,985.3	248.9
Trade and other payables	**8,952.5**	8,952.5	–	–
Expected future interest payments	**835.7**	214.5	420.6	200.6
Derivative financial liabilities	**658.9**	421.2	230.7	7.0
Total financial liabilities	**35,714.3**	**27,621.2**	**7,636.6**	**456.5**

	Total USD'M	0-1 years USD'M	1-5 years USD'M	> 5 years USD'M
30 September 2015				
Financial liabilities				
Current and non-current loans and borrowings	**21,957.9**	14,668.2	6,742.8	546.9
Trade and other payables	**9,486.3**	9,486.3	–	–
Expected future interest payments	**950.7**	208.7	511.5	230.5
Derivative financial liabilities	**1,377.4**	1,204.1	171.7	1.6
Total financial liabilities	**33,772.3**	25,567.3	7,426.0	779.0

e. Interest rate risk

Trafigura is not exposed to significant interest rate risk. Interest rate risk of the Group is mainly applicable on the long-term funding of the Group, although a majority of debt, whether long-term or short-term, is floating rate.

As at 30 September 2016, assuming the amount of floating rate liabilities (excluding working capital financing) were outstanding for the whole year, interest rates were 50 basis points higher/lower and all other variables held constant, the Group's profit, other comprehensive income and group equity for the year ended 30 September 2016 would decrease/increase by USD24.2 million (2015: USD21.8 million).

From time to time the Group enters into interest rate derivatives transactions to lock-in current interest rate levels, for instance, interest rate swaps provide a method of reducing the Group's exposure to floating interest rates arising from its corporate funding programmes. To realise the desired matching of derivative results with the hedged interest rate payments, cash flow hedge accounting is applied and the derivatives are designated as hedging instruments. The derivatives are carried on balance and their effectiveness is tested on a quarterly basis.

f. Currency risk

Trafigura has few exposures to foreign currency risk on its trading activities and those that do exist are hedged out. The Group does not use financial instruments to hedge the translation risk related to equity and earnings of foreign subsidiaries and non-consolidated companies.

The Group uses cross-currency swaps to hedge currency risk on the principal and related payments of foreign currency denominated loans and bonds for which cash-flow hedge accounting is applied. The periods when the cash flows are expected to occur are similar to the periods when the cash flows on the foreign currency denominated loans and bonds occur as indicated in Note 23 and 27d.

	Notionals		Fair values	
USD'M	**2016**	2015	**2016**	2015
Cross-currency swap	**1,670.2**	1,670.2	**(115.7)**	(156.8)
Cross-currency interest rate swap	**506.2**	279.6	**(11.5)**	(70.3)
Total	**2,176.4**	1,949.8	**(127.2)**	(227.1)

g. Fair value hedge accounting

In some instances, The Group elects to apply fair value hedge accounting to hedge certain risk components of non-financial hedged items. These non-financial hedged items are the tolling agreements which Trafigura has entered into for the processing of Eagle Ford crude oil into petroleum by-products. Ultimately, the derivative hedging instruments (splitter hedges) are aimed to hedge the spread between purchasing Eagle Ford crude oil and selling refined product. When applicable, The Group designates derivative hedging instruments as fair value hedges in relationship to the hedged item. The hedged item may be individual risk components which are separately identifiable and reliably measurable. The designated hedge derivatives are accounted for at fair value through profit and loss and reflected on the balance sheet as either a recognised asset or liability or an unrecognised firm commitment. Each of the identified risk components of the hedged item will be revalued at each period with its corresponding benchmark accounted for at fair value and recognised through profit and loss and reflected on the balance sheet as either a recognised asset or liability or an unrecognised firm commitment. Ineffectiveness will occur as a result of basis differences between the valuation of designated hedge instruments used and valuation of the designated risk component benchmarks considered to best represent the risk component.

Fair Value Hedge Accounting	2016 USD'M	2015 USD'M
LTD PnL hedging instruments as basis for hedge ineffectiveness	127.1	154.0
Carrying value of hedged item	**(151.8)**	(168.3)
LTD Hedge Ineffectiveness (recognised in Profit and Loss)	**(24.7)**	(14.3)
YTD Hedge Ineffectiveness (recognised in Profit and Loss)	**(10.4)**	(14.3)

h. Capital management

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

The Company's immediate parent, Trafigura Beheer B.V., is exclusively owned by its employees. This shareholding arrangement leads to an alignment of the long-term interests of the Company and its management team. By virtue of having its own capital at risk, senior management is incentivised to take a long-term view of the Company's overall performance and to protect its capital.

The Company's capital management aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the bank to immediately call loans and borrowings. There have been no breaches in the financial covenants of any interest-bearing loans and borrowing in the current period.

The Company monitors capital using an adjusted debt to equity ratio, which is adjusted total debt divided by the Company's equity. For this purpose, the adjusted debt metric represents the Company's total long and short-term debt less cash, deposits, readily marketable inventories, debt related to the Company's securitisation programme and the non-recourse portion of loans to third-parties.

The Company's long-term average target adjusted debt to equity ratio is 1.0x. The Company's adjusted net debt to equity ratio at the end of the reporting period was as follows:

	2016 USD'M	2015 USD'M
Non-current loans and borrowings	**7,234.2**	7,289.7
Current loans and borrowings	**18,033.0**	14,668.2
Total debt	**25,267.2**	21,957.9
Adjustments		
Cash and cash equivalents	**3,141.9**	3,534.2
Deposits	**7.9**	46.9
Inventories	**11,537.7**	7,614.4
Securitisation debt	**1,516.0**	1,258.3
Non-recourse debt	**434.8**	658.0
Adjusted total debt	**8,628.9**	8,846.1
Group equity	**5,847.1**	5,657.6
Adjusted debt to Group equity ratio at 30 September	**1.48**	1.56

As at 30 September 2016, the ratio of adjusted net debt to Group equity stood at 1.48x. The decrease of the ratio at year-end compared to 30 September 2015 is a combination of a decrease in adjusted total debt and an increase in Group Equity.

The nature of the ratio means it fluctuates between quarters, but Trafigura's long-term commitment is to maintain a disciplined approach to leverage with the aim of ensuring it does not remain significantly above its target of 1.0x on a long-term basis. We expect this ratio to revert to our stated target in the medium-term.

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

i. Fair value

(i) Fair values versus carrying amounts

The fair values of inventories, financial assets and liabilities, together with the carrying amounts shown in the statement of financial position, are as follows:

2016	Carrying value USD'M	Fair value USD'M
Assets		
Listed equity securities – Fair value through OCI	97.6	97.6
Listed debt securities – Fair value through profit or loss	327.0	311.9
Unlisted equity investments – Fair value through profit and loss	59.4	74.5
Unlisted equity investments – Fair value through OCI	56.3	56.3
Loans receivable and advances	801.3	(*)
Inventories	11,537.7	11,537.7
Trade and other receivables	15,199.9	(*)
Derivatives	573.6	573.6
Deposits	7.9	(*)
Cash and cash equivalents	3,141.9	(*)
Total financial assets and inventories	**31,802.6**	**12,651.6**
Liabilities		
Loans and borrowings		
Floating rate borrowings	23,241.0	(*)
Fixed rate borrowings	1,987.4	2,039.2
Finance lease and purchase contract	38.8	(*)
Trade and other payables	8,952.6	(*)
Derivatives	658.9	658.9
Total financial liabilities	**34,878.7**	**2,698.1**

2015	Carrying value USD'M	Fair value USD'M
Assets		
Listed equity securities – Fair value through OCI	145.3	145.3
Listed debt securities – Fair value through profit or loss	528.3	528.3
Unlisted equity investments – Fair value through profit and loss	71.2	71.2
Unlisted equity investments – Fair value through OCI	64.4	64.4
Loans receivable and advances	440.1	(*)
Inventories	7,614.4	7,614.4
Trade and other receivables	13,902.3	(*)
Derivatives	3,383.2	3,383.2
Deposits	46.9	(*)
Cash and cash equivalents	3,534.2	(*)
Total financial assets and inventories	**29,730.3**	**11,806.8**
Liabilities		
Loans and borrowings		
Floating rate borrowings	19,813.6	(*)
Fixed rate borrowings	2,095.2	1,842.9
Finance lease and purchase contract	48.8	(*)
Trade and other payables	9,486.3	(*)
Derivatives	1,377.3	1,377.3
Total financial liabilities	**32,821.2**	**3,220.2**

(*)Management has determined that the carrying amounts of trade and other receivables, cash and cash equivalents, deposits and trade and other payables reasonably approximate their fair values because these are mostly short-term in nature and are re-priced regularly.

The fair value of the guarantee disclosed in Note 26 was calculated based on level 3 valuation inputs taking into account current illiquid market conditions; which include sanctions enacted by the US and EU.

Offsetting of financial assets and liabilities

In accordance with IAS 32 the Group reports financial assets and liabilities on a net basis in the consolidated statement of financial position only if there is a legally enforceable right to set off the recognised amounts and there is intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. The financial assets and liabilities subject to offsetting, enforceable master netting and similar agreements as at 30 September 2016 and 2015 were as follows:

	Amounts eligible for set off under netting agreements			Amounts not subject to netting agreements	Net amounts presented in the statement of financial position
	Gross amount	Amounts offset	Net amount		
2016	USD'M	USD'M	USD'M	USD'M	USD'M
Related parties	914.2	(23.6)	890.6	–	890.6
Derivative assets	916.6	(678.6)	238.0	335.6	573.6
Related parties	(32.1)	23.6	(8.5)	–	(8.5)
Derivative assets	(943.6)	678.6	(265.0)	(394.0)	(659.0)

	Amounts eligible for set off under netting agreements			Amounts not subject to netting agreements	Net amounts presented in the statement of financial position
	Gross amount	Amounts offset	Net amount		
2015	USD'M	USD'M	USD'M	USD'M	USD'M
Related parties	1,080.8	(46.2)	1,034.6	–	1,034.6
Broker balances	398.0	(102.4)	295.6	85.3	380.9
Derivative assets	22,701.9	(19,491.4)	3,210.5	172.7	3,383.2
Related parties	(50.1)	46.2	(3.9)	–	(3.9)
Broker balances	(563.7)	102.4	(461.3)	(59.6)	(520.9)
Derivative liabilities	(20,328.6)	19,491.4	(837.2)	(540.2)	(1,377.4)

For the financial assets and liabilities subject to enforceable master netting or similar arrangements above, each agreement between the Group and the counterparty allows for net settlement of the relevant financial assets and liabilities when both elect to settle on a net basis. In the absence of such an election, financial assets and liabilities may be settled on a gross basis, however, each party to the master netting or similar agreement will have the option to settle all such amounts on a net basis in the event of default of the other party.

(ii) Fair value hierarchy

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- **Level 1:** quoted prices (unadjusted) in active markets for identical assets or liabilities.
- **Level 2:** inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- **Level 3:** inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Level 1 classifications primarily include futures with a maturity of less than one year. Level 2 classifications primarily include swaps and physical forward transactions which derive their fair value primarily from exchange quotes and readily observable broker quotes. Level 3 classifications primarily include physical forward transactions which derive their fair value predominately from calculations that use broker quotes and applicable market based estimates surrounding location, quality and credit differentials. In circumstances where Trafigura cannot verify fair value with observable market inputs (Level 3 fair values), it is possible that a different valuation model could produce a materially different estimate of fair value. It is Trafigura's policy to hedge significant market risk, therefore sensitivity to fair value movements is limited. Trafigura manages its market risk using the Value at Risk (VaR) as disclosed in Note 27b.

Other financial assets and inventories	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	**Total USD'M**
30 September 2016				
Listed equity securities – Fair value through OCI	97.6			**97.6**
Listed debt securities – Fair value through profit or loss	15.1		311.9	**327.0**
Unlisted equity investments – Fair value through profit and loss			59.4	**59.4**
Unlisted equity investments – Fair value through OCI			56.3	**56.3**
Futures	24.1			**24.1**
OTC derivatives		213.1		**213.1**
Physical forwards		6.5	175.6	**182.1**
Cross-currency swaps		28.5		**28.5**
Interest rate swaps		20.8		**20.8**
Other financial derivatives		104.9		**104.9**
Inventories		11,537.7		**11,537.7**
Total	**136.8**	**11,911.5**	**603.2**	**12,651.5**

Financial liabilities	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	**Total USD'M**
30 September 2016				
Futures	15.6	–	–	**15.6**
OTC derivatives	–	148.9	–	**148.9**
Physical forwards	–	1.0	227.9	**228.9**
Cross-currency swaps	–	144.2	–	**144.2**
Interest rate swaps	–	30.9	–	**30.9**
Other financial derivatives	–	90.6	–	**90.6**
Fixed rate borrowings	–	2,039.2	–	**2,039.2**
Total	**15.6**	**2,454.8**	**227.9**	**2,698.3**

Other financial assets and inventories	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	**Total USD'M**
30 September 2015				
Listed equity securities – Fair value through OCI	145.3	–	–	**145.3**
Listed debt securities – Fair value through profit or loss	–	–	528.3	**528.3**
Unlisted equity investments – Fair value through profit and loss	–	–	71.2	**71.2**
Unlisted equity securities – Fair value through OCI	–	–	64.4	**64.4**
Futures	1,311.6	–	–	**1,311.6**
OTC derivatives	–	1,365.7	–	**1,365.7**
Physical forwards	–	530.7	126.1	**656.8**
Cross-currency swaps	–	–	–	**–**
Interest rate swaps	–	–	–	**–**
Other financial derivatives	–	49.0	–	**49.0**
Inventories	–	7,614.4	–	**7,614.4**
Total	**1,456.9**	**9,559.8**	**790.0**	**11,806.7**

Financial liabilities	Level 1 USD'M	Level 2 USD'M	Level 3 USD'M	**Total USD'M**
30 September 2015				
Futures	27.1	–	–	**27.1**
OTC derivatives	–	242.6	–	**242.6**
Physical forwards	–	552.5	283.8	**836.3**
Cross-currency swaps	–	156.8	–	**156.8**
Interest rate swaps	–	70.3	–	**70.3**
Other financial derivatives	–	44.4	–	**44.4**
Fixed rate borrowings	–	1,842.9	–	**1,842.9**
Total	**27.1**	**2,909.5**	**283.8**	**3,220.4**

The overview of the fair value hierarchy and applied valuation methods can be specified as follows:

Listed equity securities – Fair value through profit or loss			**2016 USD'M**	2015 USD'M
	Level 1	Assets:	**97.6**	145.3
		Liabilities:		–
Valuation techniques and key inputs:	Quoted prices in an active market.			
Significant unobservable inputs:	None.			

Listed debt securities – Fair value through profit or loss			**2016 USD'M**	2015 USD'M
	Level 1	Assets:	**15.1**	–
		Liabilities:	**–**	–
Valuation techniques and key inputs:	Quoted prices in an active market.			
Significant unobservable inputs:	None.			

Futures			**2016 USD'M**	2015 USD'M
	Level 1	Assets:	**24.1**	1,311.6
		Liabilities:	**15.6**	27.1
Valuation techniques and key inputs:	Quoted prices in an active market.			
Significant unobservable inputs:	None.			

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

OTC derivatives			2016 USD'M	2015 USD'M
	Level 2	Assets:	**213.1**	1,365.7
		Liabilities:	**148.9**	242.6
Valuation techniques and key inputs:	Reference prices.			
Significant unobservable inputs:	Inputs include observable quoted prices sourced from traded reference prices or recent traded prices indices in an active market for identical assets or liabilities.			

Physical forwards			2016 USD'M	2015 USD'M
	Level 2	Assets:	**6.5**	530.7
		Liabilities:	**1.0**	552.5
Valuation techniques and key inputs:	Reference prices.			
Significant unobservable inputs:	Inputs include observable quoted prices sourced from traded reference prices or recent traded prices indices in an active market for identical assets or liabilities.			

Cross-currency swaps			2016 USD'M	2015 USD'M
	Level 2	Assets:	**32.5**	–
		Liabilities:	**160.3**	156.8
Valuation techniques and key inputs:	Reference prices.			
Significant unobservable inputs:	Inputs include observable quoted prices sourced from exchanges or recent traded prices indices in an active market for identical assets or liabilities.			

Interest rate swaps			2016 USD'M	2015 USD'M
	Level 2	Assets:	**16.8**	–
		Liabilities:	**14.8**	70.3
Valuation techniques and key inputs:	Discounted cash flow model.			
Significant unobservable inputs:	Inputs include observable quoted prices sourced from exchanges or traded reference indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.			

Other financial derivatives			2016 USD'M	2015 USD'M
	Level 2	Assets:	**104.9**	49.0
		Liabilities:	**90.6**	44.4
Valuation techniques and key inputs:	Discounted cash flow model.			
Significant unobservable inputs:	Inputs include observable quoted prices sourced from exchanges or traded reference indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate which captures the time value of money and counterparty credit considerations.			

Inventories			2016 USD'M	2015 USD'M
	Level 2	Assets:	**11,537.7**	7,614.4
		Liabilities:	**–**	–
Valuation techniques and key inputs:	Quoted prices in an active market.			
Significant unobservable inputs:	Premium discount on quality and location.			

Fixed rate borrowings			2016 USD'M	2015 USD'M
	Level 2	Assets:	**–**	–
		Liabilities:	**2,039.2**	1,842.9
Valuation techniques and key inputs:	Discounted cash flow model.			
Significant unobservable inputs:	Cash flows discounted at current borrowing rates for similar instruments.			

Listed debt securities – Fair value through profit or loss			2016 USD'M	2015 USD'M
	Level 3	Assets:	**311.9**	528.3
		Liabilities:	**–**	–
Valuation techniques and key inputs:	Discounted cash flow model.			

Listed debt securities – Fair value through profit or loss		2016 USD'M	2015 USD'M
Significant unobservable inputs:	• Forecast throughput • Discount rates using weighted average cost of capital		
Significant unobservable inputs:	• Market illiquidity • Operating cost and capital expenditures The resultant asset is a discounted cash flow of the underlying throughput. Increase/decrease of the forecasted throughput will result in an increase/decrease of the value of the asset. There are no reasonable changes in assumptions which will result in material change to the fair value of the asset.		

Unlisted equity investments – Fair value through profit and loss			2016 USD'M	2015 USD'M
	Level 3	Assets:	**59.4**	71.2
		Liabilities:	**–**	–
Valuation techniques and key inputs:	Quoted prices obtained from the asset managers of the funds.			
Significant unobservable inputs:	• Market illiquidity • Price of commodities			

Unlisted equity investments – Fair value through OCI			2016 USD'M	2015 USD'M
	Level 3	Assets:	**56.3**	64.4
		Liabilities:	**–**	–
Valuation techniques and key inputs:	Quoted prices obtained from the asset managers of the funds.			
Significant unobservable inputs:	• Market illiquidity • Price of commodities			

Physical forwards			2016 USD'M	2015 USD'M
	Level 3	Assets:	**175.6**	126.1
		Liabilities:	**227.9**	283.8
Valuation techniques and key inputs:	Discounted cash flow model.			
Significant unobservable inputs:	Prices are adjusted by differentials including: • Quality • Location An increase/decrease in one input resulting in an opposite movement in another input, resulting in no material change in the underlying value.			

During 2015 the fair value hierarchy of our investment in the listed debt securities related to our investment in Porto Sudeste do Brasil has been transferred from a Level 1 valuation to a Level 3 valuation. The main reason for this change is that since its issuance there has been very limited trading activity of these securities. The trading volumes underpin the illiquidity of the market with daily trading volumes in percent of total shares of maximum 0.3 percent. The illiquidity of the market and limited availability of insight information to investors may lead to behavioural biases. Therefore management has decided to change the fair value hierarchy from level 1 to level 3. For the level 3 parameters of this valuation we refer to Note 17. The movements in the Level 3 hierarchy can be summarized as follows:

USD'M	Physical forwards	Equity/Debt securities	Total
1 October 2015	**(157.7)**	**664.0**	**506.3**
Total gain/(loss) recognised in income statement	171.4	(135.1)	36.3
Total gain/(loss) recognised in OCI	–	(12.1)	(12.1)
Invested	–	5.5	5.5
Disposals	–	(94.8)	(94.8)
Total realised	(66.0)	–	(66.0)
30 September 2016	**(52.3)**	**427.5**	**375.2**

USD'M	Physical forwards	Equity/Debt securities	Total
1 October 2014	(234.2)	79.3	(154.9)
Total gain/(loss) recognised in income statement	(46.6)	34.8	(11.8)
Total gain/(loss) recognised in OCI	–	8.4	8.4
Invested	–	123.4	123.4
Disposals	–	(10.0)	(10.0)
Total realised	123.1	–	123.1
Transfer from Level 1	–	428.1	428.1
30 September 2015	(157.7)	664.0	506.3

There have been no transfers between fair value hierarchy Levels in 2016. Materially all level 3 physical forwards are settled in the next year.

28. EMPLOYEE BENEFITS

a. Equity participation plan

The immediate parent of the Company, Trafigura Beheer B.V., has an equity participation plan (EPP) which is open to employees of the Group. Shares issued to employees, are preference shares of the immediate holding company Trafigura Beheer B.V which give rights to economic benefits with limited voting rights. The value of the shares is based on the net asset value of an ordinary share as set out in Articles of Association of Trafigura Beheer B.V which management believe is a fair approximation of the fair value. Beheer Malta Limited, a parent company of Trafigura Beheer B.V., together with the Board of Directors of the Company decide on the share awards to be issued to employees. Shares awarded under the EPP may vest immediately or over a period of several years. If employment is ceased prior to the end of the vesting period the shares will be forfeited except otherwise determined by Beheer Malta Limited.

Employees do not have the right to sell shares that have vested unless a purchase offer has been made by Trafigura Control Holdings SARL (a 100% subsidiary of Beheer Malta Ltd and direct controlling shareholder of Trafigura Beheer B.V.) Upon termination of employment, employees must transfer all of their shares at the direction of Trafigura Control Holdings SARL.

Neither Trafigura Beheer B.V and nor the Company have neither a legal nor constructive obligation to settle the shares held by employees in cash.

The Group accounts for the EPP as an equity-settled plan; the fair value of the shares granted, determined at the grant date, is recorded in the statement of income rateably over the vesting period of the shares.

During 2016, 5,613 immediately vesting shares were granted to employees representing a value of USD24.0 million (2015: 5,139 shares representing a value of USD13.8 million) and 28,251 shares were granted with a vesting period of 1-5 years representing a value of USD120.8 million (2015: 12,430 shares representing a value of USD33.5 million).

Compensation in respect of share based payments recognised in staff costs amounted to USD77.7 million in 2016 (2015: USD51.1 million).

Unrecognised staff costs in respect of rateably vesting shares expected to be recognised from 2017 to 2020 amount to USD107.0 million at 30 September 2016 (2015: USD44.9 million).

b. Personnel expenses

	2016 USD'M	2015 USD'M
Salaries and bonuses	**395.4**	408.1
Social security costs	**25.0**	26.9
Pension costs	**15.4**	18.2
Share-based payments	**77.7**	51.1
Total	**513.5**	504.3

The average number of employees split geographically is depicted below:

2016	Oil and Petroleum FTE	Metals and Minerals FTE	All other segments FTE	Total FTE
North, Central and South America	201	1,929	148	**2,278**
Europe and Africa	248	470	245	**963**
Asia, Middle East and Australia	205	301	360	**866**
Total	**654**	**2,700**	**753**	**4,107**

2015	Oil and Petroleum FTE	Metals and Minerals FTE	All other segments FTE	Total FTE
North, Central and South America	197	2,043	192	**2,432**
Europe and Africa	205	1,313	330	**1,848**
Asia, Middle East and Australia	192	369	407	**968**
Total	**594**	**3,725**	**929**	**5,248**

29. RELATED PARTIES

In the normal course of business, the Company enters into various arm's length transactions with related parties including fixed price commitments to sell and to purchase commodities, forward sale and purchase contracts, agency agreements and management service agreements. Outstanding balances at period end are unsecured and settlement occurs in cash. There have been no guarantees provided or received for any related party receivables or payables.

All transactions between the Company and its subsidiaries are eliminated on consolidation along with any unrealised profits and losses between its subsidiaries, associates and joint ventures.

a. Transactions with key management personnel

(i) Key management personnel compensation

The Management team consists of the Board of Directors and members of the Trading Committee and Investment Committee. In addition to their salaries, the Group also provides non-cash benefits to members of the Management team. Members of the Management team also participate in the Group's share participation programme (see Note 28). Compensation of the Management team comprised of the following:

	2016 USD'M	2015 USD'M
Short-term employee benefits	**18.1**	3.8
Post-employment benefits	**0.5**	0.3
Share-based payments	**22.0**	5.4
Total	**40.6**	9.5

F. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(CONTINUED)*

(ii) Key management personnel and director transactions

As at 30 September 2016, loans receivable from the members of the Management team total USD11.6 million (2015: USD3.1 million). Interest is charged on the loans at approximately LIBOR + 1% and the loans are repayable within the 1-3 year bracket.

b. Other related-party transactions

Related-party receivables/(payables)	2016 USD'M	2015 USD'M
Trafigura Beheer B.V.	**352.6**	202.8
Puma Energy Holding	**374.1**	747.7
PT Servo Meda Sejahtera	**122.5**	147.0
Farringford N.V.	**17.2**	(60.4)
Beheer Malta Ltd	**(7.2)**	1.2
Ecore B.V.	**16.4**	28.9
Emincar	**150.0**	–
Buckeye Partners LLC	**–**	0.1
JINCHUAN Group Co. Ltd.	**31.4**	–
Minas de Aguas Teñidas, S.A.U (MATSA)	**262.2**	498.7
Other	**100.9**	1.1
Total	**1,420.2**	1,567.1

	2016 USD'M	2015 USD'M
Sales (mainly Puma Energy)	**6,697.4**	5,798.3
Purchases	**1,456.1**	594.8
Terminalling & dockage fees	**148.1**	60.0
Interest income	**35.7**	32.0
Interest expense	**13.6**	17.5

Transactions between related parties are made on terms equivalent to those that prevail in arm's length transactions.

Below table summarises the nature of relationship and nature of transactions entered with the related party:

Party	Nature of relationship	Nature of transaction
Farringford N.V.	Ultimate parent	Loans and cost recharges
Trafigura Beheer B.V.	Parent company	Loans and cost recharges
Beheer Malta Ltd.	Parent company	Buy back of treasury shares
Ecore B.V.	Cousin group	Cost recharges, trading and hedging
Buckeye Partners LLC	Equity-accounted investee	Lease agreements
EMINCAR	Equity-accounted investee	Financing and trading agreement
JINCHUAN Group Co. Ltd.	Equity-accounted investee	Trading agreement
Minas de Aguas Teñidas, S.A.U (MATSA)	Equity-accounted investee	Financing and trading agreement
PT Servo Meda Sejahtera	Equity-accounted investee	Loan
Puma Energy Holding	Equity-accounted investee	Financing and trading agreement
Porto Sudeste do Brasil S.A.	Equity-accounted investee	Loans and cost recharges

A list of consolidated subsidiaries and associates is included in Note 32.

30. NEW STANDARDS AND INTERPRETATIONS NOT YET ADOPTED

The Group has not applied the following new and revised IFRSs, which have been issued but are not yet effective, in these financial statements.

- IFRS 14 Regulatory Deferral Accounts, effective 1 January 2016. Will not be endorsed for use in the EU
- IFRS 15 Revenue from Contracts with Customers including amendments to IFRS 15, effective 1 January 2018
- IFRS 16 Leases, effective 1 January 2019
- Amendments to IAS 1 Presentation of Financial Statements – Disclosure Initiative, effective 1 January 2016
- Amendments to IFRS 10 Consolidated Financial Statements and IAS 28 Investments in Associates and Joint Ventures – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture, effective 1 January 2016
- Amendments to IFRS 10 Consolidated Financial Statements and IFRS 12 Disclosure of Interests in other entities and IAS 28 Investments in Associates and Joint Ventures – Applying the Consolidation Exception, effective 1 January 2016
- Amendments to IFRS 11 Joint Arrangements – Accounting for Acquisitions of Interests in Joint Operations, effective 1 January 2016
- Amendments to IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets – Clarification of Acceptable Methods of Depreciation and Amortisation, effective 1 January 2016
- Amendments to IAS 16 Property, Plant and Equipment and IAS 41 Agriculture – Bearer Plants, effective 1 January 2016
- Amendments to IAS 27 Separate Financial Statements – Equity Method in Separate Financial Statements, effective 1 January 2016
- Annual Improvements to IFRSs 2012-2014 Cycle (Issued September 2014), effective 1 January 2016
- Amendments to IAS 12 Income Taxes – Recognition of Deferred Tax Assets for Unrealised Losses, effective 1 January 2017.
- Amendments to IAS 7 Statement of Cash Flows – Disclosure Initiative, effective 1 January 2017
- Clarifications to IFRS 15 Revenue from Contracts with Customers, effective 1 January 2018.
- Amendments to IFRS2 Share-based Payment – Classification and Measurement of Share-based Payment Transactions, effective 1 January 2018.

In 2015 the Group early adopted IFRS 9 – Financial Instruments.

The Group is in the process of making an assessment of the impact of these new and revised IFRSs upon initial application. There have been no material new IFRS standards or amendments on IFRS standards which have been applied for the first time in 2016.

31. SUBSEQUENT EVENTS

On 15 October 2016 a consortium was formed between the Company (49%), United Capital Partners (UCP) (49%) and Essar (2%). Through a holding structure, the consortium has agreed to purchase a 49% stake in Mumbai-based Essar Oil Limited from Essar Energy Holdings Limited.

Essar Oil Limited (EOL) owns India's second largest private refinery and world-class storage and import/export facilities located near Vadinar city, as well as a domestic retail network business consisting of over 2,700 retail stations.

The transaction is supported by an efficient capital structure involving non-recourse bank finance. The agreement, which is targeted to close by the end of 2016, is subject to anti-trust and other regulatory clearances. Trafigura has a commitment for a capital contribution under the transaction of a maximum USD320 million.

Essar Oil Limited has plans to expand its oil refining capacity and to build a petrochemical complex. The deregulation of pricing of the Indian retail market is expected to bring potential growth opportunities for the company's retail network.

32. CONSOLIDATED SUBSIDIARIES AND ASSOCIATES

For entities where legal shareholding is less than 50%, the Group has consolidated based on the definition of control under IFRS. Certain entities with a percentage of effective economic interest below 50% are held through intermediate holding companies controlled by the Group.

Principal consolidated operating subsidiaries	Location	% Owned 2016	% Owned 2015
Angola Exploration Mining Resources S.A.	Angola	0.0%	30.0%
AngoRecycling Industry, Lda.	Angola	25.0%	25.0%
Boyaca Navigation Inc.	Panama	100.0%	100.0%
Catalina Huanca Sociedad Minera S.A.C.	Peru	100.0%	100.0%
DT Trading Ltd.	Bahamas	50.5%	50.5%
DTS Commercial Pte. Ltd.	Singapore	50.0%	50.0%
DTS Refining Pte. Ltd.	Singapore	50.0%	50.0%
Edenfield Procurement DMCC	United Arab Emirates	100.0%	100.0%
Empresa de Recolha de Residuos de Angola, Lda. (Errangol)	Angola	25.0%	25.0%
Fangchenggang Guo Tong Import and Export Co. Ltd.	China	100.0%	100.0%
Galena Asset Management B.V.	Netherlands	100.0%	100.0%
Galena Asset Management Limited	United Kingdom	100.0%	100.0%
Galena Investments 2 Limited	Malta	100.0%	100.0%
Galena Investments 2 S.à r.l.	Luxembourg	100.0%	100.0%
Galena Investments Limited	Malta	100.0%	100.0%
Galena Investments S.à r.l.	Luxembourg	100.0%	100.0%
Genghis Holding Company Limited	Malta	100.0%	100.0%
Iberian Minerals Corp.	Switzerland	100.0%	100.0%
Impala Holdings Limited	Malta	100.0%	100.0%
Impala Logistics (Shanghai) Company Limited	China	100.0%	100.0%
Impala Terminals Barrancabermeja S.A.	Colombia	100.0%	100.0%
Impala Terminals Burnside LLC	United States	100.0%	100.0%
Impala Terminals Colombia SAS	Colombia	100.0%	100.0%
Impala Terminals DRC SARL	Congo, The Democratic Republic of the	100.0%	100.0%
Impala Terminals Mexico, S.A. de C.V.	Mexico	100.0%	100.0%
Impala Terminals Middle East FZE	United Arab Emirates	100.0%	100.0%
Impala Terminals Peru S.A.C	Peru	100.0%	100.0%
Impala Terminals UK Limited	United Kingdom	100.0%	100.0%
IWL (Luxembourg) S.à r.l.	Luxembourg	100.0%	100.0%
IWL Capital LLC	Marshall Islands	100.0%	100.0%
IWL Holding B.V.	Netherlands	100.0%	100.0%
IWL Holdings (Luxembourg) S.à r.l.	Luxembourg	100.0%	100.0%
IWL Investments (Luxembourg) S.à r.l	Luxembourg	100.0%	100.0%
IWL River Inc.	Panama	100.0%	100.0%
Luna Mining SARL	Congo, The Democratic Republic of the	100.0%	100.0%
Manatee Holding Company Limited	Malta	100.0%	100.0%
Meteor Ltd.	Isle of Man	100.0%	100.0%
Ningbo Minghui Recycling Resources Co., Ltd.	China	95.0%	95.0%
Petromining S.A.	Argentina	100.0%	100.0%
Puma Energy Holdings Malta Limited	Malta	100.0%	100.0%
Shanghai Trafigura Energy and Resource Trading Co., Ltd.	China	100.0%	100.0%
TAG ECO Recycling (UK) Limited	United Kingdom	100.0%	100.0%
Trafigura B.V.	Netherlands	100.0%	100.0%

Principal consolidated operating subsidiaries	Location	% Owned 2016	% Owned 2015
Trafigura Canada General Partnership	Canada	100.0%	100.0%
Trafigura Chile Limitada	Chile	100.0%	100.0%
Trafigura Corpus Christi Holdings LLC	United States	100.0%	100.0%
Trafigura Derivatives Limited	United Kingdom	100.0%	100.0%
Trafigura DMCC	United Arab Emirates	100.0%	100.0%
Trafigura Eurasia LLC	Russian Federation	100.0%	100.0%
Trafigura Funding S.A.	Luxembourg	100.0%	100.0%
Trafigura Holdings Limited	Malta	100.0%	100.0%
Trafigura India Private Limited	India	100.0%	100.0%
Trafigura Investment (China) Co., Ltd.	China	100.0%	100.0%
Trafigura Limited	United Kingdom	100.0%	100.0%
Trafigura Maritime Ventures Limited	Malta	100.0%	100.0%
Trafigura Marketing Inc.	United States	100.0%	100.0%
Trafigura Marketing Ltd.	Canada	100.0%	100.0%
Trafigura Mexico, S.A. de C.V.	Mexico	100.0%	100.0%
Trafigura Nat Gas Limited	Malta	100.0%	100.0%
Trafigura Overseas Projects Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Peru S.A.C.	Peru	100.0%	100.0%
Trafigura Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Services Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Services South Africa (Pty) Ltd.	South Africa	100.0%	100.0%
Trafigura Trade Investments B.V.	Netherlands	100.0%	100.0%
Trafigura Trading LLC	United States	100.0%	100.0%
Trafigura Trading Yangshan Co., Ltd.	China	100.0%	100.0%
Trafigura Ventures Trading Ltd.	Mauritius	100.0%	100.0%
Urion Holdings (Malta) Limited	Malta	100.0%	100.0%
Impala Middle East General Warehousing L.L.C.	United Arab Emirates	100.0%	100.0%
Leeuwin Holding Co. Ltd.	Bahamas	100.0%	100.0%
Trafigura Holding GmbH	Switzerland	100.0%	100.0%
Trafigura Trade Holdings B.V.	Netherlands	100.0%	100.0%
DSA Ventures I LLC	Marshall Islands	100.0%	100.0%
Trafigura Holdings Pte. Ltd.	Singapore	100.0%	–
Urion Mining International B.V.	Netherlands	100.0%	100.0%

Equity-accounted investees carried at net equity value	Location	% owned 2016	% owned 2015
Buckeye Texas Partners LLC	United States	20.0%	20.0%
Empresa Minera del Caribe S.A.	Caribbean	49.0%	36.6%
Guangxi Jinchuan Nonferrous Metals Co., Ltd	China	30.0%	–
Napoil Limited	Bermuda	49.0%	49.0%
Osmunda Limited	Isle of Man	–	33.0%
Porto Sudeste do Brasil S.A.	Brazil	47.4%	47.3%
PT Servo Meda Sejahtera	Indonesia	46.5%	40.0%
Puma Energy Holdings Pte. Ltd.	Singapore	49.6%	48.6%
Transportadora Callao S.A.	Peru	30.0%	30.0%
ATALAYA MINING PLC (previously known as EMED MINING PUBLIC LIMITED)	Cyprus	22.0%	22.0%
Nyrstar N.V.	Belgium	24.6%	23.7%
TM Mining Ventures, S.L.	Spain	50.0%	50.0%

33. BOARD OF DIRECTORS

THE BOARD OF DIRECTORS	
Christopher Cox	Sipko Schat
Mark Irwin	Andrew Vickerman
José Larocca	Mike Wainwright
Pierre Lorinet	Jeremy Weir

Singapore, 2 December 2016.

NOTES

MIX
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EXHIBIT D

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

RICHARD SIERRA; VERONICA GOOCH; ROLAND SIERRA; LUCIA LLERAS DE LABRADA; PRISCILLA LLERAS-BUSH, in her personal capacity and as Personal Representative of the ESTATE OF OLGA ROMAGOSA; MÁRIAN MARIA DE LOS ANGELES ROMAGOSA; and LISETTE ROMAGOSA SMYRNIOS, *Plaintiffs*,	§	Civil Action No. 22-366 (MN)
v.	§	
TRAFIGURA TRADING LLC, TRAFIGURA GROUP PTE LTD., *Defendants*.	§	

DECLARATION OF DAN PETERS

1. My name is Dan Peters. I am Regional Controller, North America, for Trafigura Trading LLC ("TTL"). I am over the age of eighteen (18) years old. I have personal knowledge of the facts set forth herein, and am competent to testify regarding such facts.

2. References herein to "Trafigura" are a reference to the overall Trafigura "Group" of companies. The reference parent company and consolidating entity for the Trafigura Group of companies is Trafigura Group PTE Ltd. ("TGPL"), a non-operating holding company incorporated in Singapore.

3. Per publicly-available information provided in Trafigura's annual reports, I am aware that Trafigura is a participant in a joint venture with the Cuban state mining company Geominera S.A. The joint venture is called Empresa Minera del Caribe S.A. ("EMINCAR").

4. TTL has not funded or facilitated in any way the funding of EMINCAR, nor of any EMINCAR-related business activities.

5. TTL is a well-capitalized independent operating entity within the Trafigura Group of companies. TTL is a U.S.-based trading business responsible for conducting trading business in the United States. It trades for its own account.

6. TTL has not financed, nor has it in any way facilitated the financing of, investments or business activities relating to Cuba or EMINCAR.

7. TTL is not involved in any trading that relates to offtake from EMINCAR mining operations.

8. TTL has rigorous compliance procedures and training designed to ensure that it operates in full compliance with all applicable sanctions, including the U.S. sanctions restricting U.S. persons and businesses from engaging in commercial activities in or with Cuba. These compliance procedures and training are designed to, among other things, ensure TTL and its personnel are not involved in any funding or other commercial activities relating to Cuba.

9. TTL has not received any revenues, profits or benefits from EMINCAR-related activities. TTL derives revenue from its own business activities, which activities have no connection to EMINCAR or Cuba. TTL's revenue and any related profit is ultimately consolidated at the TGPL level.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Dated: June 9, 2022
Houston, Texas

Dan Peters

EXHIBIT E

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

RICHARD SIERRA; VERONICA GOOCH; ROLAND SIERRA; LUCIA LLERAS DE LABRADA; PRISCILLA LLERAS-BUSH, in her personal capacity and as Personal Representative of the ESTATE OF OLGA ROMAGOSA; MÁRIAN MARIA DE LOS ANGELES ROMAGOSA; and LISETTE ROMAGOSA SMYRNIOS, *Plaintiffs*,	§	Civil Action No. 22-366 (MN)
v.	§	
TRAFIGURA TRADING LLC, TRAFIGURA GROUP PTE LTD., *Defendants*.	§	

DECLARATION OF DENISE ROGERS

1. My name is Denise Rogers. I am the Compliance Manager for Trafigura Trading LLC ("TTL"), based in Houston, Texas. I am over the age of eighteen (18) years old. I have personal knowledge of the facts set forth herein, and am competent to testify regarding such facts.

2. In my role, I manage various import and logistics-related compliance functions for TTL. This includes regulatory compliance relating to the company's import activities.

3. TTL does not purchase or import any mineral offtake from Cuba, including from the Empresa Minera del Caribe, S.A. mining operations.

4. To the best of my knowledge and experience, Trafigura PTE Ltd. ("TPTE") does not do business in the United States. I am not aware of TPTE having any import permitting, licensing, tax or tariff obligations in the United States.

5. TTL does not act as an agent for TPTE, Urion Holdings (Malta) Ltd. (the entity that manages the "Mining Group"), Trafigura Group PTE Ltd., or for any other Trafigura entity.

TTL is a standalone corporate entity that acts as an independent operating entity within the Trafigura Group of companies. It trades and otherwise conducts its own business on its own account.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Dated: June 9, 2022
Houston, Texas

Denise Rogers

Denise Rogers
Compliance Manager
Trafigura Trading LLC

EXHIBIT F

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

RICHARD SIERRA; VERONICA GOOCH; ROLAND SIERRA; LUCIA LLERAS DE LABRADA; PRISCILLA LLERAS-BUSH, in her personal capacity and as Personal Representative of the ESTATE OF OLGA ROMAGOSA; MÁRIAN MARIA DE LOS ANGELES ROMAGOSA; and LISETTE ROMAGOSA SMYRNIOS, *Plaintiffs*,	§ § § § § § § § §	Civil Action No. 22-366 (MN)
v.	§ § §	
TRAFIGURA TRADING LLC, and TRAFIGURA GROUP PTE LTD., *Defendants*.	§ § §	

<u>DECLARATION OF JESUS IVAN MUNOZ CUEVAS</u>

1. My name is JESUS IVAN MUNOZ CUEVAS. I am the Concentrates Operational Manager of Trafigura PTE Ltd., Sucursal Uruguay. I am over the age of eighteen (18) years old. I have personal knowledge of the facts set forth herein, and am competent to testify regarding such facts.

2. In my role, I manage an operational team located in Uruguay, members of which handle non-U.S. regional operations for commercial agreements entered into by Trafigura outside the United States.

3. References herein to "Trafigura" are a reference to the overall Trafigura "Group" of companies. The reference parent company and consolidating entity for the Trafigura Group of companies is Trafigura Group PTE Ltd. ("TGPL"), a non-operating holding company incorporated in Singapore.

4. Trafigura is a participant in a joint venture with the Cuban state mining company Geominera S.A. The joint venture is called Empresa Minera del Caribe S.A. ("EMINCAR"). Trafigura holds a 49 percent ownership stake in EMINCAR.

5. The offtake from EMINCAR mining operations is not and has not been sold or imported by any Trafigura entity into U.S. markets or to U.S. counterparties. All offtake from EMINCAR mining operation is sold to counterparties for import into China, Malaysia, Indonesia or Turkey. To my knowledge, all such offtake has actually been delivered into China, Malaysia, Indonesia or Turkey, and Trafigura Trading LLC has no involvement in the offtake or deliveries.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Dated: June 08, 2022
Montevideo, Uruguay

Jesus Ivan Múnoz Cuevas
Concentrates Operational Manager
Trafigura PTE Ltd.

EXHIBIT G

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

RICHARD SIERRA; VERONICA GOOCH; ROLAND SIERRA; LUCIA LLERAS DE LABRADA; PRISCILLA LLERAS-BUSH, in her personal capacity and as Personal Representative of the ESTATE OF OLGA ROMAGOSA; MÁRIAN MARIA DE LOS ANGELES ROMAGOSA; and LISETTE ROMAGOSA SMYRNIOS, *Plaintiffs*,	§	Civil Action No. 22-366 (MN)
v.	§	
TRAFIGURA TRADING LLC, TRAFIGURA GROUP PTE LTD., *Defendants*.	§	

DECLARATION OF CHRIS MCLAUGHLIN

1. My name is Chris McLaughlin. I am Global Head of Group Treasury of Trafigura Holding GmbH, Geneva Branch. I am over the age of eighteen (18) years old. I have personal knowledge of the facts set forth herein, and am competent to testify regarding such facts.

2. In my role, I am responsible for all foreign exchange, operational treasury and corporate funding matters within Trafigura.

3. References herein to "Trafigura" are a reference to the overall Trafigura "Group" of companies. The reference parent company and consolidating entity for the Trafigura Group of companies is Trafigura Group PTE Ltd. ("TGPL"), a non-operating holding company incorporated in Singapore.

4. Trafigura is a participant in a joint venture with the Cuban state mining company Geominera S.A. The joint venture is called Empresa Minera del Caribe S.A. ("EMINCAR"). Trafigura holds a 49 percent ownership stake in EMINCAR.

5. None of Trafigura's funding of EMINCAR or EMINCAR-related business activities has: (i) been in U.S. dollars, (ii) been paid using U.S. banks or other U.S. financial institutions, (iii) involved U.S. persons or (iv) involved U.S. operations of Trafigura such as Trafigura Trading LLC ("TTL").

6. Trafigura has made a limited number of Euro-denominated payments to EMINCAR from an investment account maintained outside the United States that is funded from general cash pools of one or more non-U.S. Trafigura entities. Trafigura has funded the overwhelming majority of its investment in EMINCAR through a segregated Euro account maintained outside the United States consisting of retained earnings from non-U.S. company operations and proceeds from sales of corporate assets outside the United States.

7. Trafigura has not funded any EMINCAR-related payment via financing guaranteed by the U.S.-domiciled company TTL or in which TTL is otherwise involved, including the financing Plaintiffs refer to in their Amended Complaint. This includes no use of financing from any financing vehicle for which TTL has served as a guarantor, originator or in which TTL has in any way otherwise been involved. Specifically, the $145 million U.S. private placement referred to in Plaintiff's Amended Complaint at paragraph 52 was not used to fund anything relating to EMINCAR, and had no relation whatsoever to the $140 million credit facility referred to in that paragraph.

8. None of Trafigura's TTL-related financing transactions is specifically designed to facilitate financing for the Mining Group or EMINCAR. None has been designed, implemented or used to fund, finance or facilitate any operations in or relating to EMINCAR or Cuba, nor do they have any other connection to or role in any activities in or relating to EMINCAR or Cuba.

9. Trafigura has not otherwise established any special purpose vehicles, issued any debt instruments or sought any financing or access to capital markets (in the United States or otherwise) in order to fund its investment in EMINCAR, including the $140 million credit facilities and the $145 million capital raise referred to in the Amended Complaint.

10. Any description of Trafigura's investment in EMINCAR that includes a U.S. dollar value is not an indication that any aspect of the investment or related business activities has actually been U.S. dollar-denominated, or been paid via U.S, banks or financial institutions. Rather, this is reflective only of the U.S. dollar being Trafigura's presentation currency. Such use of the U.S. dollar as the presentation currency is consistently described in the notes to the consolidated financial statements included as part of Trafigura's publicly-available annual reports.

11. TTL has not received any revenues, profits or benefits from EMINCAR-related activities. TTL derives revenue from its own business activities, which activities have no connection to Mining Group activities outside the United States, including no connection to EMINCAR or Cuba. TTL's revenue and any related profit is ultimately consolidated at the TGPL level.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Dated: June 10, 2022
Geneva, Switzerland

Chris McLaughlin
Global Head of Group Treasury
Trafigura Holding GmbH

EXHIBIT H

COLECCION LEGISLATIVA CUBANA
Volumen II

CONSTITUCION

DE LA

REPUBLICA DE CUBA

Texto publicado en la "Gaceta Oficial" número 464, de 8 de Julio de 1940

PUBLICACION AUTORIZADA POR EL GOBIERNO

JESUS MONTERO, EDITOR
OBISPO, 521
LA HABANA
1940

CONVENCION CONSTITUYENTE

LEY No. 1

CONSTITUCION DE LA REPUBLICA DE CUBA

Nosotros, los Delegados del pueblo de Cuba, reunidos en Convención Constituyente a fin de dotarlo de una nueva Ley Fundamental que consolide su organización como Estado independiente y soberano, apto para asegurar la libertad y la justicia, mantener el orden y promover el bienestar general, acordamos, invocando el favor de Dios, la siguiente Constitución:

TITULO PRIMERO

DE LA NACIÓN, SU TERRITORIO Y FORMA DE GOBIERNO

Artículo 1.—Cuba es un Estado independiente y soberano organizado como república unitaria y democrática, para el disfrute de la libertad política, la justicia social, el bienestar individual y colectivo y la solidaridad humana.

Artículo 2.—La soberanía reside en el pueblo y de éste dimanan todos los poderes públicos.

Artículo 3.—El territorio de la República está integrado por la Isla de Cuba, la Isla de Pinos y las demás islas y cayos adyacentes que con ellas estuvieron bajo la soberanía de España hasta la ratificación del Tratado de París de diez de diciembre de mil ochocientos noventa y ocho.

La República no concertará ni ratificará pactos o tratados que en forma alguna limiten o menoscaben la soberanía nacional o la integridad del territorio.

Artículo 4.—El territorio de la República se divide en provincias y éstas en términos municipales. Las actuales pro-

que se trate, y se observarán los principios de reciprocidad internacional.

Artículo 83.—La Ley regulará la forma en que podrá realizarse el traslado de fábricas y talleres a los efectos de evitar que se envilezcan las condiciones del trabajo.

Artículo 84.—Los problemas que se deriven de las relaciones entre el capital y el trabajo se someterán a comisiones de conciliación, integradas por representaciones paritarias de patronos y obreros. La Ley señalará el funcionario judicial que presidirá dichas comisiones y el tribunal nacional ante el cual sus resoluciones serán recurribles.

Artículo 85.—A fin de asegurar el cumplimiento de la legislación social, el Estado proveerá a la vigilancia e inspección de las empresas.

Artículo 86.—La enumeración de los derechos y beneficios a que esta Sección se refiere, no excluye otros que se deriven del principio de la Justicia Social, y serán aplicables por igual a todos los factores concurrentes al proceso de la producción.

Sección Segunda

PROPIEDAD

Artículo 87.—El Estado cubano reconoce la existencia y legitimidad de la propiedad privada en su más amplio concepto de función social y sin más limitaciones que aquellas que por motivos de necesidad pública o interés social establezca la Ley.

Artículo 88.—El subsuelo pertenece al Estado, que podrá hacer concesiones para su explotación, conforme a lo que establezca la Ley. La propiedad minera concedida y no explotada dentro del término que fije la Ley será declarada nula y reintegrada al Estado.

La tierra, los bosques y las concesiones para explotación del subsuelo, utilización de aguas, medios de transporte y toda otra empresa de servicio público, habrán de ser explotadas de manera que propendan al bienestar social.

Artículo 89.—El Estado tendrá el derecho de tanteo en toda adjudicación o venta forzosa de propiedades inmuebles y de valores representativos de propiedades inmobiliarias.

Artículo 90.—Se proscribe el latifundio y a los efectos de su desaparición la Ley señalará el máximo de extensión de la propiedad que cada persona o entidad pueda poseer para cada tipo de explotación a que la tierra se dedique y tomando en cuenta las respectivas peculiaridades.

La Ley limitará restrictivamente la adquisición y posesión de la tierra por personas y compañías extranjeras y adoptará medidas que tiendan a revertir la tierra al cubano.

Artículo 91.—El padre de familia que habite, cultive y explote directamente una finca rústica de su propiedad, siempre que el valor de ésta no exceda de dos mil pesos, podrá declararla con carácter irrevocable como propiedad familiar, en cuanto fuere imprescindible para su vivienda y subsistencia, y quedará exenta de impuestos y será inembargable e inalienable salvo por responsabilidades anteriores a esta Constitución. Las mejoras que excedan de la suma anteriormente mencionada abonarán los impuestos correspondientes en la forma que establezca la Ley. A los efectos de que pueda explotarse dicha propiedad, su dueño podrá gravar o dar en garantía siembras, plantaciones, frutos y productos de la misma.

Artículo 92.—Todo autor o inventor disfrutará de la propiedad exclusiva de su obra o invención, con las limitaciones que señale la Ley en cuanto a tiempo y forma.

Las concesiones de marcas industriales y comerciales y demás reconocimientos de crédito mercantil con indicaciones de procedencia cubana, serán nulos si se usaren, en cualquier forma, para amparar o cubrir artículos manufacturados fuera del territorio nacional.

Artículo 93.—No se podrán imponer gravámenes perpetuos sobre la propiedad del carácter de los censos y otros de naturaleza análoga y en tal virtud queda prohibido su establecimiento. El Congreso, en término de tres legislaturas, aprobará una Ley regulando la liquidación de los existentes.

Quedan exceptuados de lo prescrito en el párrafo anterior, los censos o gravámenes establecidos o que se establezcan a beneficio del Estado, la Provincia o el Municipio, o a favor de instituciones públicas de toda clase o de instituciones privadas de beneficencia.

Artículo 94.—Es obligación del Estado hacer cada diez años por lo menos un Censo de Población, que refleje todas las actividades económicas y sociales del país, así como publicar regularmente un Anuario Estadístico.

Artículo 95.—Se declaran imprescriptibles los bienes de las instituciones de beneficencia.

Artículo 96.—Se declaran de utilidad pública y por lo tanto en condiciones de ser expropiadas por el Estado, la Provincia o el Municipio, aquellas porciones de terreno que, donadas por personas de la antigua nobleza española para la

TITLE VI

Concerning Labor and Property

FIRST SECTION

Labor

ART. 60. Labor is an inalienable right of the individual. The State shall employ all the resources in its power to provide an occupation for everyone who lacks such, and shall assure the economic conditions necessary for a proper existence to every worker, manual or intellectual.

ART. 61. Every worker, manual or intellectual, in public or private enterprise of the State, Province, or municipality shall have a guaranteed minimum salary or wage, which shall be determined in keeping with the conditions of each region and the normal necessities of the worker, from material, moral, and cultural considerations, and considering him as the head of the family.

The law shall establish the manner of periodically regulating the minimum salaries or wages by means of committees with equal representation for each branch of labor, according to the standards of living, the peculiarities of each region, and each industrial, commercial, or agricultural activity.

In labor performed by the complete task, it shall be obligatory that the minimum wage for a day's work be reasonably assured.

The minimum of all salaries or wages is unattachable, except in case of responsibilities for payment of allowances in support of other persons in the form that the law may establish. The tools of labor belonging to workers are also unattachable.

ART. 62. For equal work under identical conditions, an equal salary shall always be paid regardless of persons.

ART. 63. No discount not authorized by the law may be made on any wage or salary of manual and intellectual workers.

Amounts owing to workers for services and wages earned in the past year shall have preference over any others.

ART. 64. Payment in tickets, tokens, merchandise, or any other article by which an attempt is made to replace money of legal tender is absolutely prohibited. Violations of this prohibition shall be punishable by law.

Day laborers shall receive their salary within a period not longer than one week.

ART. 65. Social insurance benefits are established as irrenounceable and imprescriptible rights of workers, with the equitable cooperation of the State, the employers, and the workers themselves, for the purpose of protecting the latter in an effective manner against illness, old age, unemployment, and the other exigencies of labor, in the form that the law may determine. The rights of old-age pensions and death benefits are likewise established.

The administration and governing of the institutions to which the first paragraph of this article refers shall be the duty of organizations elected with equal representation by employers and workers, with the participation of a representative of the State, in the form determined by law, except in the case of that created by the State for the bank of social insurance.

Insurance covering accidents of world and for occupational diseases, at the exclusive expense of the employer and under

the control of the State, is declared equally obligatory.

Social insurance funds or reserves may not be transferred, and may not be used for any purposes other than those that determined their creation.

ART. 66. The maximum working day shall not exceed eight hours. This maximum may be reduced to six hours a day for persons more than fourteen and less than eighteen years of age.

The maximum working week shall be forty-four hours, equivalent to forty-eight hours in pay, with the exception of industries which, because of their nature, must carry on uninterrupted production within a certain period of the year, until the specific regulation in these exceptional cases is determined by law.

Labor and apprenticeship is prohibited to persons less than fourteen years of age.

ART. 67. The right of all manual and intellectual workers to one month of vacation on pay for every eleven months of work in every natural year is established. Those who, on account of the type of work or other circumstances, may not have worked the eleven months, shall have the right to vacation on pay for a period proportional to the tinge worked.

When workers stop work on account of a national holiday or mourning, employers must guarantee them the corresponding wages for this time.

There shall be only four days of national holiday and mourning on which the closing of industrial or commercial establishments or those of public entertainment is obligatory. The remaining official holiday or mourning days shall be celebrated without suspension of the economic activities of the Nation.

ART. 68. No wage differential may be established between married women and single women.

The law shall regulate the protection of motherhood of working women, extending this protection to women who are employed.

A pregnant woman may not be separated from her employment within three months before childbirth, or be required to do work that may require considerable physical effort.

During the six weeks immediately preceding childbirth and the six weeks following, a woman shall enjoy obligatory vacation from work on pay at the same rate, retaining her employment and all the rights pertaining to such employment and to her labor contract. During the nursing period, two extraordinary daily rest periods of a half hour each shall be allowed her to feed her child.

ART. 69. The right of organization is recognized for employers, private employees, and workers, for the exclusive purposes of their economico-social activity.

The competent authority shall have a period of thirty days in which to admit or refuse to admit the registry of a workers' or employers' association. The registration shall determine the juridical personality of the workers' or employers' association. The law shall regulate everything concerned with the recognition of the association by the employers and by the workers respectively.

Associations may not be finally dissolved until a provisional decision has been made by the tribunals of justice.

The officials of these associations shall be exclusively Cubans by birth.

ART. 70. Official obligatory collective organization is established in the practice of university-trained professions. The law shall determine the form of the organization and functioning of such bodies, by. a higher organization of national character, and by the local organizations that may be necessary, in a manner such that they may be regulated with full authority by the majority of their colleagues.

The law shall also regulate the obligatory collective organization of the other professions recognized officially by the State.

ART. 71. The right of workers to the strike and the right of employers to the lockout is recognized, in conformity with the regulations that the law may establish for the exercise of both rights.

ART. 72. The law shall regulate the system of collective contracts of labor, the fulfillment of which shall be obligatory for both employers and workers.

Stipulations implying renunciation' diminution, impairment, or relinquishment of any right in favor of the worker that is recognized in this Constitution or in the law, even if expressed in a labor contract or in any other pact, shall be null and shall not obligate the contracting parties.

ART. 73. The majority of persons participating in labor shall be Cubans by birth as much as regards to total amount of wages and salaries as in the distinct categories of labor, in the form determined by law.

Protection shall also be extended to naturalized Cubans with families born in the national territory, with preference over naturalized citizens who do not meet these conditions, and over aliens.

The stipulations in the preceding paragraphs concerning aliens shall not be applied in the filling of indispensable technical positions, subject to the prior formalities of the law, and with provision that apprenticeship in the technical work in question be facilitated for native Cubans.

ART. 74. The ministry of labor shall take care, as an essential part, among others, of its permanent social policy, that discriminatory practices of no kind shall prevail in the distribution of opportunities for labor in industry and commerce. In personnel changes and in the creation of new positions, as well as in new factories, industries, or businesses that may be established, it shall be obligatory that opportunities for labor be distributed without distinctions on a basis of race or color, provided that requirements of ability are satisfactorily met. It shall be established by law that any other practice shall be punishable and may be prosecuted officially or at the instance of the aggrieved party.

ART. 75. The formation of co-operative enterprises, whether commercial, agricultural, industrial, of the consumer, or any other type, shall be subject to regulation by the law; but the latter shall regulate the definition, constitution, and functioning of such enterprises in order that they shall not serve to evade or abridge the provisions that this Constitution establishes for the regulation of labor.

ART. 76. The law shall regulate immigration in keeping with the national economic system and with social necessities. The importation of contract labor, as well as all immigration tending to debase the condition of labor, is prohibited.

ART. 77. No enterprise may discharge a worker except for good reason and with the other formalities that the law which determines the just causes for dismissal shall establish.

ART. 78. The employer shall be responsible for compliance with the social laws, even when labor is contracted by an

intermediary agency.

In all industries and kinds of labor in which technical knowledge is required, apprenticeship shall be obligatory in the form that the law may establish.

ART. 79. The State shall support the creation of low-cost dwellings for workers.

The law shall determine the enterprises that, by employing workers outside of population centers, are obliged to provide adequate housing for workers, as well as schools, infirmaries, and other services and advantages in behalf of the physical ant! moral well-being of the worker ant} his family.

The conditions which shops, factories, and places of work of all kinds must maintain shall likewise be regulated by law.

ART. 80. Social assistance shall be established under the direction of the ministry of health and social assistance; this assistance shall be organized by special legislation, which shall appropriate funds to provide for the necessary reserves.

Hospital, sanitary, medical examiners, and other positions that may be necessary in organizing the corresponding official services in an adequate manner, shall be established.

Charitable institutions of the State, Province, and municipality shall oder services of a gratuitous character only to the poor.

ART. 81. Reciprocity is recognized as a social principle and practice.

The law shall regulate its operation in such a manner that persons of modest means may enjoy its benefits, and at the same time so that it shall render a fair and adequate protection to the professional.

ART. 82. Only Cubans by birth and naturalized Cubans who have held their status as such for five years or more prior to the date of their seeking authorization to practice, may practice professions that require official title, except as provided in Article 57 of this Constitution. However, the Congress may, by special law, grant temporary suspension of this provision when, for reasons of public utility, the co-operation of foreign professionals and technicians shall be necessary or convenient in the development of public or private undertakings of national interest. Such a special law shall fix the limits and period of the authorization.

In the fulfillment of this provision, as well as in cases in which, by any law or regulation, the practice of any new profession, art, or office may be regulated, the working rights acquired by persons who, until that time may have practiced the profession, art, or office in question, shall be respected, and the principles of international reciprocity shall be observed.

ART. 83. The law shall regulate the manner in which factories and shops may be transferred for the purpose of avoiding debasement of the conditions of labor.

ART. 84. Problems arising from the relations between capital and labor shall be submitted to committees of conciliation, composed of equal representation of employers and workers. The law shall stipulate the judicial officials who shall preside over the said committees, ant] the national tribunal before which their decisions are appealable.

ART. 85. In order to assure compliance with social legislation, the State shall provide for the supervision and inspection of enterprises.

ART. 86. The enumeration of the rights and benefits to which this section refers shall not exclude others arising from the principle of social justice, and they shall be equally applicable to all elements involved in the process of production.

SECOND SECTION

Property

ART. 87. The Cuban State recognizes the existence and legitimacy of private property in the fullest concept of its social function, and with no further limitations than those that may be established by law for reasons of public necessity or social interest.

ART. 88. The subsoil belongs to the State, which may make concessions for its exploitation, in conformity with what the law may establish. Mining property granted and not exploited within the period that the law may fix shall be declared null and shall revert to the State.

Land, forests, and concessions for the exploitation of the subsoil, utilization of waters, means of transportation, and every other enterprise of public service, must be exploited in a manner favorable to the social welfare.

ART. 89. The State shall have the right to be a party in all auctions or forced sales of real property and of things representative of values in immovable property.

ART. 90. Latifundia are outlawed, and in order to effect their disappearance the law shall stipulate the maximum extent of property that each person or corporation may possess for each type of exploitation for which the land may be employed, at the same time taking into account individual circumstances.

The law shall restrictively limit acquisition ant! possession of land by foreign persons and companies, and shall adopt measures tending to revert the lancI to Cuban ownership.

ART. 91. The father of a family who lives upon, cultivates, and directly exploits a rural property that he owns, provided that the value of the latter does not exceed 21000 pesos, may declare it of irrevocable character as family property as soon as it may be essential for his living and subsistence, and said property shall be exempt from taxes and shall be unattachable and inalienable except for responsibilities incurred prior to this Constitution. Improvements that exceed the sum above mentioned shall pay the corresponding taxes in the manner that the law may establish. In order to exploit the said property the owner may mortgage it, or give sowings, plantings, fruits, or products of the same as guarantees.

ART. 92. Every author or inventor shall enjoy exclusive ownership of his work or invention, with the limitations stipulated by law as to time and form.

Concessions of industrial and commercial trademarks, and other recognition of mercantile credits with indications of Cuban origin, shall be null if such concessions are used in any way for protecting or covering articles manufactured outside of the national territory.

ART. 93. No perpetual charges on property in the character of perpetual interest payments or other charges of an analogous nature may be imposed, and, furthermore, the establishment of such charges is prohibited. The Congress shall approve a law regulating the liquidation of the existing charges within a period of three legislative terms.

Perpetual interest payments, or charges established, or which may be established, to the benefit of the State, Province, or municipality, or in favor of public institutions of all kinds or of private institutions of beneficence are excepted from the stipulations of the preceding paragraph

ART. 94. It is the obligation of the State to take a census of population at least every ten years, that shall reflect all the economic and social activities of the country. The State shall also publish a statistical yearbook regularly.

ART. 95. The property of charitable institutions is declared to be imprescriptible.

ART. 96. Those areas of land given by persons of old Spanish nobility for the founding of a town or community, and effectively employed for this purpose, acquiring the character of a municipal government, though afterward occupied or held by the heirs or inheritors of the donor, are declared to be in the nature of a public utility and therefore subject to expropriation by the State, the Province, or the municipality.

The inhabitants of such a town or city, Who possess buildings or occupy lots in the settled part, may obtain ownership or possession of the estates or sections of lane! that they may be occupying, by payment of a fair proportionate price through the expropriating body empowered to transfer the said property to them.

EXHIBIT I

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in
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CUBA LAW DIGEST*

Revised for 1958 edition by

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(Abbreviations used are: C. C., Civil Code; C. Com., Code of Commerce; L. C. P., Law of Civil Procedure; O. J. L., Organic Judiciary Law; M. O., Military Order; R. D., Royal Decree; L-D, Law Decree; Const., Constitution of 1940; Ley Const., Law with constitutional force.)

ACKNOWLEDGMENTS:

According to the system in force generally where the civil law prevails, contracts, deeds and other documents which require authentication by a public official are prepared by a notary or other authorized officer and made a part of his protocol; that is to say, the original documents are kept in an official registry in the office of the notary or official. See "Notaries Public" and "Public Instruments." Documents executed abroad are entitled to recognition in Cuban courts if authenticated by a Cuban consular or diplomatic officer, with a certificate from such officer that the document is drafted in accordance with the local law and has the formal requisites designated in such law, or if executed before such officer; the signature of the Cuban authenticating officer must be certified by the Ministry of State of Cuba. Recording offices, however, refuse to record such documents without filing in a notarial office, and in general it is better to execute all papers in the Spanish form, even if in the English language. The legal effect which in the United States is secured by seals and acknowledgments is obtained in Cuba by having the document executed before a notary in the form known as a public instrument.

However, a Cuban notary may subscribe at the end of a document an acknowledgment of a signature and while this does not have the same effect as a formal public instrument when required by Cuban law it has certain legal value in Cuba and may be used in documents intended for the United States.

ADMINISTRATION:

See Executors and Administrators.

ADVERSE POSSESSION: See Prescription.

AGENCY: See Principal and Agent.

AIRCRAFT: See Motor Vehicles.

ALIENS:

Aliens may legally own property, make contracts and engage in commercial enterprises in Cuba without restriction on account of nationality. They are not obliged to become citizens or to pay extraordinary taxes, but if they come to Cuba for the purpose of establishing their residence, they must within ten days after arrival be registered in the Registry of Aliens and obtain a registration certificate which must be renewed annually. Transients remaining over three months must likewise be registered. (Decree-laws 788 of Dec. 28, 1934, 532 of Jan. 25, 1936).

The Ley Const. (art. 90) authorizes restrictions on ownership and possession of lands by foreign persons and corporations. Law 7 of Nov. 25, 1948, permits leases of rural lands only to Cubans, to aliens who are married to native Cubans, or have Cuban children, or are veterans of the Cuban War of Independence, and to Cuban partnerships or corporations all of whose members or stockholders fulfill any of the above requirements.

ALIMONY: See Divorce.

ASSIGNMENTS:

See Deeds; Public Instruments.

ASSIGNMENTS FOR BENEFIT OF CREDITORS:

No special provisions.

ASSOCIATIONS:

In general, clubs and associations not formed for profit, are subject to the Law of Associations as contained in the Royal Decree of June 13, 1888, according to which the Governor of the Province must be furnished in advance with copies of the articles of association and by-laws and be advised of the dates of meeting. He is empowered to suspend associations committing illegal acts. (Decree 3718 of Nov. 24, 1942).

ATTACHMENT:

In the summary actions known as executory suits attachments are ordered when the suit is admitted by the judge. In ordinary or declaratory suits, in order to secure a provisional attachment the following conditions must exist: (1) That documentary evidence is submitted proving the existence of the debt, and (2) that the debtor (a) is a foreigner, or (b) if a Cuban, that he has no known domicile or does not own real property or has no agricultural, commercial or industrial place of business where payment of the debt can be demanded, or (c) if having these qualifications, that he has disappeared from his domicile or place of business without leaving any person in charge, or conceals himself or if there is any reason to believe that he conceals or is about to conceal or dispose of his property to the detriment of his creditors. Attachments may also be decreed if solicited by a merchant against a debtor who is or has been a merchant or manufacturer, if the debt arises from a mercantile transaction; in this case documentary evidence is not required. Unless the plaintiff is of known responsibility, the judge must require bond to pay such costs and damages as may result to the debtor. Attachment without bond may be decreed if based on a bill of exchange when drawee's signature is not questioned at time of protest for nonpayment. (Law 7 of Apr. 5, 1943, art. 39). When a provisional attachment has been issued for over $500, the plaintiff must bring the appropriate executory or declaratory action within 20 days after the levying of the attachment. (L. C. P. arts. 1395-1426).

AUTOMOBILES: See Motor Vehicles.

BANKRUPTCY:

Bankruptcy proceedings as well as proceedings relating to suspension of payments are so cumbersome and protracted that they are seldom employed, the creditors generally preferring to make large sacrifices rather than become involved therein.

Suspension of payments by judicial decree is preferred to bankruptcy, since it is less complicated. It may be declared on the statement of the merchant that he possesses sufficient property to pay his debts but foresees that he will be unable to meet them at maturity; also in case the merchant is unable by reason of misfortune to pay his debts fully. In the latter case he must guarantee the payment of at least 50% of the debts. The judge designates a merchant to supervise the business and calls a meeting of creditors. The creditors appoint a representative, who, with another appointed by the judge and a third appointed by the debtor, investigates the assets and liabilities. A general meeting of creditors is then held, which votes on the recognition of claims and on the proposition of the debtor, and determines whether the debtor's business should be liquidated or permitted to continue. At the meeting a majority is constituted by one-half plus one of the creditors voting, provided their interest covers 75% of the total liabilities. The decision if favorable to the debtor is published in the official newspaper. Foreign creditors who were not represented at the meeting may object to the decision within two months from such publication if they reside in North America, and within six months if they

* See Topical Index in front part of this volume.

reside elsewhere; in the event of such objection they are not bound by the decision. After a suspension of payments is declared no creditor may levy execution nor claim privileges, except in certain cases. Private agreements between the debtor and a creditor are forbidden: in the event one is made the creditor loses his rights and the debtor is considered a fraudulent bankrupt. (C. Com. arts. 870-873; Law of June 24, 1911).

Bankruptcy proceedings relate to merchants. A merchant who cannot meet his current obligations may be declared bankrupt on his own petition or on the application of a creditor. The creditor must show an attachment returned unsatisfied or proof that the merchant has generally ceased to make payments. The bankruptcy may be: (1) Fortuitous; (2) culpable; or (3) fraudulent; in the latter two cases the merchant is liable to prosecution under the Penal Code. Upon a declaration of bankruptcy the judge appoints a commissioner, who must be a merchant, to represent him, and a depositary. The creditors appoint three receivers from among their number. The depositary reports to the receivers, the receivers to the commissioner and to the creditors, and the commissioner to the judge. Compositions and settlements with creditors are permitted at any time after the determination of the debts and the decision as to whether the bankruptcy is fortuitous, culpable or fraudulent. Such compositions and settlements may be approved by one-half plus one of the creditors present at the meeting, provided their interest covers three-fifths of the total liabilities. (C. Com. arts. 874-922; L. C. P. arts. 1316-1394).

For insolvent debtors who are not merchants or stock companies, a special procedure is provided. Insolvency may be declared on their petition or on evidence that two or more attachments have been returned unsatisfied. The creditors elect three receivers to take charge of the liquidation. (L. C. P. arts. 1128-1315).

Insolvencies and bankruptcies of railroad companies are also governed by special provisions. (M. O. 34 of 1902).

BILLS AND NOTES:

(C. Com. arts. 443-572; Law 5 of Dec. 20, 1950).

Bills of exchange must show the following: (1) Place and date of issue; (2) date when due; (3) name of person to whose order drawn; (4) amount; (5) name and address of drawee; (6) signature of drawer. If the bill is defective it is considered as a promissory note guaranteed by the drawer, the acceptor and the endorsers.

Persons who draw, endorse or accept bills of exchange in a representative capacity must have a power of attorney, which fact must be stated on the instrument. Purchasers and holders of such bills have a right to require such attorney to show his power.

Bills must be paid before sunset of due date. No days of grace. Bill which falls due on holiday payable on day preceding.

Endorsement must contain: (1) Name of endorsee; (2) date; (3) signature of endorser. Endorsements in blank or omitting date nevertheless transfer ownership of the draft. Bills not to order, or matured, or not properly protested, cannot be endorsed, but may be transferred in other ways. Their endorsement has the effect of an assignment between the parties. Endorsers are liable to subsequent endorsers, unless they add the words "without my liability."

Bills must be presented for acceptance or payment at the proper time. Foreign drafts at sight or at a period after sight must be presented for acceptance within 40 days after their arrival in Cuba. Those drawn for payment within fixed period after date need not be presented unless holder chooses to present them. Acceptance is signified by writing "I accept" or "we accept" and date and signature. Acceptance cannot be conditional but may be for a smaller amount. Acceptance imposes on acceptor the obligation of paying at maturity without any defense except forgery of acceptance. If acceptance refused bill must be protested.

Bills must be presented for payment on their due date, and in case of nonpayment must be protested, even though previously protested for nonacceptance. Protest must be made within eight days following the day on which acceptance or payment was refused. It must be made before a notary public and appear in a notarial document setting forth a copy of the draft and endorsements, the demand for payment, the answer to the demand, and the date and hour of the protest. If a bill is not presented for acceptance or payment at the proper time and is not protested in case of failure to accept or pay, all action against the endorsers is lost, and also against the drawer if he provided sufficient funds in the hands of the drawee. If the drawee becomes bankrupt protest may be made before the due date.

The holder of a protested bill may draw a new bill against the drawer or one of the endorsers, for the principal, interest and expenses. The new bill should be accompanied by the original protested bill as well as a certified copy of the protest and the account of the re-draft stating the name of the drawee and the amount of the bill, protest costs, exchange, brokerage, expenses and loss by reason of the re-exchange.

Bills drawn abroad are governed by the laws of the country of origin but, upon receipt in Cuba for negotiation, acceptance or collection, must bear Cuban tax stamps according to a graduated scale. (Law 7 of Apr. 5, 1943, art. 34; Law 5 of Dec. 20, 1950).

Promissory notes and other documents payable to order should contain: (1) Name of document; (2) date of issue; (3) amount; (4) due date; (5) name of payee; (6) place of payment; (7) form of consideration; (8) signature of maker. They are generally subject to the law governing bills of exchange. If not payable to order they are not commercial paper and are subject to rules of Civil Code regarding promises to pay.

Checks are in the same form with which American lawyers are familiar. Checks must be presented for payment within five days of their issue if drawn in the same city, within eight days if drawn elsewhere in Cuba, and within 12 days if drawn abroad. If not so presented the holder loses his right to summary action against the endorsers and also against the maker if the funds deposited by the latter disappear by reason of the insolvency or bankruptcy of the depositary. However, the ordinary action on the debt may be brought within 15 years.

CHATTEL MORTGAGES:

Chattel mortgages are unknown to the law of Cuba, but certain liens may be imposed on crops, cattle, or industrial property, or to secure the unpaid balance of the purchase price of chattels, or banking credits or loans. (Law 5 of Dec. 20, 1950). Mortgages may be placed only on real property, rights in rem and crops. Personal property, such as machinery, pictures, statuary, etc., is included in mortgage on realty when it forms an inherent part of the realty. See Liens; Mortgages; Pledges.

CLAIMS:

See Executors and Administrators.

COLLATERAL SECURITY: See Pledges.

COMMISSIONS TO TAKE TESTIMONY:

See Depositions.

COMMUNITY PROPERTY:

See Husband and Wife.

CONDITIONAL SALES: See Sales.

CONSTITUTION AND GOVERNMENT:

A temporary constitutional law was issued by the de facto government Apr. 4, 1952. It replaced the Constitution of Oct. 10, 1940, and is known as "Ley Constitucional," mentioned in this digest as "Ley Const." It retains much of the 1940 Constitution, but eliminates Congress and vests legislative authority in a Council of Ministers (Cabinet) and a Consultive Council, both groups acting as advisors to the President.

The Electoral Law of Sept. 3, 1957 provides that in the June, 1958 elections there shall be direct voting on the ballots for the offices of president, vice-president, provincial governors and municipal mayors. The senate is increased from 64 to 72 members, being 12 senators for each province, seven of whom shall be elected by the majority party, three by the "first minority party" and two by the "second minority party." The last two cannot be elected if the

"second minority party" does not receive votes totalling at least 40% of the votes received in that province by the "first minority party." The house of representatives shall have one member for every 35,000 inhabitants or fraction greater than 17,500. Half of those elected in June 1958 will serve only until Jan. 28, 1961. The other half, selected by the house of representatives itself, shall remain in office until Jan. 28, 1963. Candidates belonging to the party receiving the majority vote shall receive preference for the longer term. Candidates elected in June, 1958 shall take office on the following schedule: mayors and assemblymen, Jan. 3, 1959; governors, Jan. 15, 1959; congressmen, Jan. 28, 1959, and the president and vice-president on Feb. 24, 1959.

The courts and provincial and municipal governments have not been structurally affected by above mentioned change of government. The Republic is still divided into six provinces which in turn are divided into municipalities.

CONTRACTS:

The subject of contracts is extensively treated in the Civil Code. All obligations consist in giving, doing or not doing something. They are derived from the law, from contracts and quasi-contracts, and from unlawful or negligent acts. They may be conditional or unconditional, divisible or indivisible. They are extinguished by payment or performance, loss of the thing owing, remission of the debt, merger of rights, compensation and novation. Contracts require three essentials: consent, object and consideration. Consideration may consist in an action, promise or service, or in the mere liberality of a party. The Code gives detailed rules relating to various specific contracts, including those of purchase-sale, exchange, rental of property or of services, agency, loan, deposit, guarantee, pledge, mortgage, etc. (C. C. arts. 1088-1975).

CONVEYANCES:

See Deeds; Public Instruments.

COPYRIGHT:

Copyrights are governed by the law of January 10, 1879, and by international conventions. They are granted for the life of the author and 80 years thereafter. If the author transfers a copyright and dies leaving obligatory heirs (see "Descent and Distribution"), the copyright returns to the heirs 25 years after his death and they have the enjoyment thereof for the remaining 55 years. For the registration of copyrights there is a general registry in the Department of Education. The registration must be effected and three copies of the publication filed within one year; otherwise, the work may be published by others during ten years. If registration is not made in 11 years the work definitely becomes public property. With certain exceptions works not republished in 20 years lose copyright privileges.

CORPORATIONS:

There is no special incorporation law, but corporations (sociedades anónimas) are covered by C. Com. arts. 116-238, the provisions of which are very liberal.

Organization.—Two or more persons may organize a corporation and there is no restriction as to the nationality or residence of the incorporators. Foreigners who are incorporators, unless present in person before the notary, must send their power of attorney, but Cuban corporations may also be organized outside of Cuba. Persons wishing to incorporate may do so by executing a "public instrument" before a notary, which must contain the following data: (1) The names and domiciles of the incorporators; (2) the name of the corporation; (3) the designation of the persons who are to direct the affairs of the corporation and the manner of filling vacancies; (4) the corporation capital stating the value at which property, not cash, contributed, has been appraised or the basis on which the appraisement is to be made; (5) the number of shares; (6) the period within which any unpaid portion of the capital subscribed at the time of incorporation is to be paid in, otherwise stating what persons are authorized to determine the time and manner in which payment is to be made; (7) the duration of the corporation; (8) the objects of the corporation; (9) the periods and manner of calling and holding regular stockholders' meetings and the cases and manner in which special stockholders' meetings are called and held; (10) the submission to the vote of the majority of stockholders of matters which may properly be brought before them; (11) the manner of constituting the majority at regular and at special stockholders' meetings; (12) any further lawful agreements and conditions.

Registration.—The company is in existence from the time the document of incorporation is executed, but is required before beginning operations to file the notarial copy of the document of incorporation in the registry of companies and in the mercantile registry. The corporation must register all issues of stocks and bonds in the mercantile registry.

Sugar companies must also list their stocks and bonds on the Havana Stock Exchange. (Decree 778 of March 15, 1944).

Corporation Fees and Taxes.—Fiscal fees amounting to 9/10% of all stock and bond issues must be paid. The mercantile registry fee varies according to the capital of the corporation: for corporations of over $100,000 capital it is $10 for the first $100,000 of capital and $1 for each additional $20,000. A like fee is payable in the registry of companies. The notarial tariff also varies according to the amount involved; thus it is $15 for the first $15,000 and .05% on the excess over $100,000. There are also moderate license fees.

Liability of Stockholders and Directors.—Stockholders are liable only for the unpaid portion of their stock. The directors are regarded as the agents of the corporation and are subject to no personal or joint liability, so long as they observe the rules of that agency; if losses occur by reason of their violation of the laws or of the by-laws of the corporation or of lawful resolutions of the corporation, they are liable pro rata.

Management.—The affairs of the corporation are managed by such number of directors as the document of incorporation determines, elected in the manner and at the time provided in such document. The reduction or increase of the corporate capital must be determined by the stockholders by vote of such number of stockholders and amount of stock as the document of incorporation provides, but at least two-thirds of the number of stockholders and two-thirds of the face value of the stock must be present or represented at the meeting. There is no restriction as to the nationality or residence of the directors or stockholders nor any prohibition against holding directors' meetings outside of Cuba. Secretaries of corporations must be Cuban lawyers.

Stock may be registered or to bearer, but must be registered until at least 50% of its face value has been paid in. New series cannot be issued before the total payment of the series previously issued. Corporations may purchase their own shares only with the profits of their capital for the purpose of amortization, and cannot give guarantees by pledging their own shares.

Dissolution.—Corporations are dissolved in case of: (1) The termination of the period fixed for their duration; (2) the entire loss of the capital; (3) bankruptcy. They cannot be considered as tacitly extended. From the time a corporation is declared in liquidation the directors have merely the powers of liquidators to collect credits, extinguish pending obligations and carry out pending transactions, but stockholders' meetings continue for the purposes of the liquidation.

Government inspection may cover all operations and accounts of corporations and inquire whether articles of incorporation, by-laws and resolutions of stockholders and directors are carried out. Annual balances must be filed with government and published in official newspaper; these steps must precede any other publication. (Decree 1123 of Oct. 25, 1909). Later Decrees (No. 2554 of Sept. 12, 1940 and 3356 of Aug. 14, 1951) granted more powers of supervision to the Government.

Mixed Corporations.—(Decree-law 1198 of Nov. 26, 1953). A new type of corporate entity was established in 1953 called "Sociedad Económica Mixta," that is, an entity in which the State contributes part of the capital and has a voice in the management. It is intended to apply in the field of public service or the development of agricultural or industrial enterprises

deemed beneficial to the national economy. During the life of the corporation the private stockholders may acquire the equity interest of the State but if the State ceases to have any capital participation then the tax exemptions and benefits originally granted to the corporation will cease.

Foreign corporations may do business in Cuba upon filing in the registry of companies and in the mercantile registry their certificate of incorporation and by-laws and other information additional to that required to be filed upon the organization of a Cuban corporation, and in addition, a certificate from the Cuban Consul stating that the corporation has been organized in accordance with the law of its domicile. The Cuban Consul before giving his certificate requires such proof as he deems advisable. In practice certified copies of the articles of incorporation and by-laws are filed in a Cuban notary's office as "public instruments," and are then recorded in the mercantile registry and in the registry of companies. Foreign corporations doing business in Cuba must have a resident representative upon whom legal notices may be served. Foreign corporations are subject to the same taxes as domestic corporations except the fiscal fees on issues of stocks and bonds. They must file annual balances of their Cuban business with the government and publish them in official newspaper. (Decree 1369 of May 16, 1944).

COURTS:

Organic Judiciary Law is Decree No. 127 of January 27, 1909, as am'd by Law 7 of May 21, 1949.

Justice is administered in the following courts: (1) Municipal courts with jurisdiction in certain courts up to $500 and in others up to $100, and with respect to certain eviction cases; (2) correctional courts which decide police cases and minor misdemeanors; (3) courts of first instance which have original jurisdiction in all civil matters not pertaining to the municipal courts and hear appeals from municipal courts; (4) courts of instruction for the investigation of criminal offenses; (5) seven "Audiencias" in the Provinces, with original jurisdiction over litigation with the government and over all criminal matters not pertaining to the correctional courts and with appellate jurisdiction over civil matters decided by the courts of first instance; (6) a Supreme Court at Havana which hears appeals for errors of law from decisions of the Audiencias, also to a very limited degree for errors of fact.

The Tribunal of Social and Constitutional Guarantees, authorized by the Constitution of 1940, was created as a Chamber of the Supreme Court, by Law 7 of May 21, 1949, am'd by Law 10 of May 31, 1949. It has jurisdiction over questions of constitutionality of laws, abuse of power by government bodies, and protection of social and constitutional rights of individuals.

CURTESY:

There is no right of curtesy. For rights of surviving husband, see Descent and Distribution; Husband and Wife.

DEATH:

If a person disappears leaving no one to administer his property, a guardian or custodian may be appointed for his estate. Two years after his disappearance, or five years if he left an authorized representative, he may be declared an absentee. Thirty years after his disappearance or 90 years from the date of his birth, he may be declared presumptively dead. (C. C. arts. 181-198).

Deaths must be recorded in the Civil Registry. Death certificates are obtainable from the Chief of the Civil Registry of the municipality or district where death occurred. A nominal fee is charged pursuant to municipal or district regulations.

DECEDENTS' ESTATES:

See Descent and Distribution; Executors and Administrators; Wills.

DEEDS:

All transfers of title to any interest in real estate must be by "public instrument" (see "Public Instruments") and must contain a true statement of the consideration (not a nominal consideration), a full description of the property by bounds and its area which must be expressed in the metric measurement and may also be expressed in other measurements. The state tax upon transfers of title, 3.6% upon the consideration, is based on the consideration expressed in the deed, if that appears reasonable to the Treasury officials. If the consideration is stated to be less than the reasonable value of the property, the Treasury officials appraise the property and base the tax on their own appraisal. The deed cannot be recorded until the transfer tax is paid.

The deed must be presented at the office of the Treasury for the determination of the amount of the tax, within 30 days if executed in Cuba; within eight months if executed elsewhere in America; within two years if executed in Europe or Africa; and in three years if executed in Asia or Oceania. After these periods a surcharge of 1% per month is added. Fines are also imposed of 20%, 30% or 50% in case of delays and special circumstances or of 100% if holder refuses to present document. (L-D 411 of Sept. 18, 1952).

Both grantor and grantee must sign the deed and both must therefore be present before the notary at the same time. If one is absent he must be represented by an attorney-in-fact. Both parties must read the instrument in full or it must be read to them by the notary at one sitting. The original deed, if executed in Cuba, must remain permanently in the files of the Cuban notary who gives to either party a certified copy which has the effect of an original in courts of law. If the deed is executed in the United States, it must be authenticated by a Cuban Consul, who must certify that it is in accord with the local law and has the formal requisites designated in such law, and it must then be filed in a Cuban notary's office before recording. Deeds affecting real estate must be recorded. See Records.

DEEDS OF TRUST: See Mortgages.

DEPOSITIONS:

All testimony of witnesses in civil cases is by deposition, the interrogatories being filed with the judge who passes on them and examines the witness in accordance therewith. Depositions may be taken before the regular period of testimony if the witness is of advanced age or about to depart to a place of difficult access or when there are other special circumstances. Letters rogatory may be issued to another judge if the examination is to take place elsewhere. A simple ex parte proceeding is provided to prove possession or ownership for the purpose of recording titles in the registry of properties. (L. C. P. arts. 501, 636-665, 2001-2009).

Consular officers have notarial functions with respect to depositions and other documents.

Letters rogatory from without Cuba should be transmitted through diplomatic channels, or as provided by treaty.

DESCENT AND DISTRIBUTION:

Estates of decedents pass either by will or by operation of law. The rights are transmitted from the moment of the death of the testator. The law designates various acts which render the guilty parties incapable of inheriting, such as abandonment of children by parents, etc.

Only part of the decedent's estate may be disposed of freely by will; a certain portion goes to the heirs by operation of law (obligatory heirs—"herederos forzosos"), the amount of such portion depending upon the degree of relationship between the decedent and the heirs. The portions pertaining to such obligatory heirs are called "legal portions" ("legítimas").

Obligatory heirs are the children and descendants or, if there are none, the parents and ascendants, also the surviving spouse. The legal portion pertaining to children is two-thirds of the estate; in one of these thirds they have an equal share, the other may be distributed among them as the testator desires. The third of the estate not pertaining to the children may be disposed of freely by the testator. If there are no children the legal portion of the surviving parents is one-half of the estate. The surviving spouse has, in addition to a half right in the marriage partnership property (see "Husband and Wife"), a life interest in a portion of the estate which varies according to whether

there are one or more children or no children. In case there is more than one child the life estate comprises a portion equivalent to the smallest portion which any of the children could inherit. Natural children (that is, children born out of wedlock to parents who could at the time of conception have married) receive smaller shares than legitimate children, the proportion depending on whether there are legitimate descendants or ascendants.

The above statements are taken from the provisions of the Civil Code, but it should be noted that the Constitution of 1940 and the Ley Constitucional (art. 46 in both) grant to Cuban citizens the right to freely dispose by will of one-half of their estates, thus creating a conflict with the Civil Code which provides for the free disposition of only one-third. The Supreme Court of Cuba on June 22, 1944, held that the provisions of the Civil Code shall continue in force until Congress shall legislate on the subject.

In default of testamentary provisions the estate passes to the following in the order named: (1) legitimate descendants; (2) ascendants; (3) natural children; (4) brothers and sisters; (5) the surviving spouse; (6) collaterals up to the sixth degree; (7) the state. The shares of deceased heirs, except ascendants, pass to their heirs per stirpes, but in the collateral line not beyond the children of brothers and sisters.

In order to be entitled to an inheritance the heir must accept the same. The acceptance may be unconditional or subject to the making of an inventory. The heirs accept the estate individually, and the acceptance of one does not affect the rights of the others. An unconditional acceptance may be made in writing or may be implied from any act which indicates that the heir has accepted the inheritance. In the case of an unconditional acceptance, the heir is liable for all the debts of the decedent, not only out of the estate which he accepts but also out of his own property. An acceptance with benefit of inventory may be made before a notary or before the proper judge. In the case of such qualified acceptance the heir is responsible for the debts of the decedent only out of the estate which he inherits and his own property is not affected.

Estates of decedent foreigners pass according to the law of the foreigner's nationality. Foreigners may inherit from Cubans in the same manner as Cubans. (C. C. arts. 657-1087; Law of May 31, 1928).

DESERTION: See Divorce.

DIVORCE:

(C. C. arts. 104-107; divorce law 206 of May 10, 1934; law Dec. 17, 1937).

Divorce may be absolute or limited. Grounds for absolute divorce are: (1) Adultery; (2) attempt of husband to prostitute wife or of either spouse to corrupt or prostitute the children or their participation in such corruption or prostitution; (3) grave physical cruelty; (4) grave and reiterated insults; (5) conviction for certain grave felonies committed after marriage; (6) conviction for committing or attempting to commit a grave crime against the other spouse or the children; (7) habitual drunkenness; (8) habitual gambling; (9) abandonment of the home for over six months; (10) voluntary and reiterated failure to maintain the home; (11) judicial declaration of absence, six months after such declaration; (12) contagious sexual disease contracted in sexual acts; (13) separation for over six months; (14) chronic insanity, two years after judicial declaration; (15) incompatibility; (16) any vice or moral defect damaging the honor, credit or reputation of the other spouse; (17) drug-addiction; (18) bigamy; (19) mutual consent.

The action must be brought by the innocent party, except that for causes (13), (14), (15) and (19) it may according to the law be brought by either party. However this provision has been declared unconstitutional with respect to cause 13. In the case of causes (1) and (2), it is barred by limitation six months after the cause came to the knowledge of the other party; in cause (3), six months after the acts were committed; in other cases the action may be brought as long as the cause exists.

The competent court is the court of the domicile of the plaintiff; if the parties reside in different places in Cuba, or one of them resides abroad, the action may be brought at the residence of the defendant or plaintiff or at the last residence of the couple.

Mutual Consent.—For divorce by mutual consent the parties must twice appear in person in court with an interval of one month, and state their desire to be divorced; within three days after the second appearance the judge grants the divorce. If either party fails to appear on either occasion the proceedings are dismissed.

Alimony.—The wife is entitled to alimony pendente lite. Under the divorce laws, as interpreted by the courts, an innocent wife who lacks sufficient property to live, may demand alimony, to be determined in the divorce decree, independently of the amounts payable for the maintenance of the children. Such alimony ceases when she dies, remarries or lives in concubinage. It may be reduced or increased according to her needs and the husband's economic position. It may be recorded as a lien on the husband's real estate and the court may require additional security. The obligation continues beyond the death of the husband as a charge on such part of his estate as does not go to obligatory heirs. See Descent and Distribution.

Children.—The court determines who shall have the custody of the children, the agreement of the parties being followed if possible. Children under five years of age must remain in the custody of the mother, except for serious reasons. As a rule daughters over that age are given to the mother and sons to the father. If both parents are deprived of the custody of the children, they are confided to the person who would be entitled to guardianship.

Remarriage.—The husband may remarry at any time, and the wife after three hundred and one days, but the Minister of Justice may waive this impediment. The parties may remarry among themselves at any time.

Actions by Aliens.—Cuban courts will take jurisdiction of divorce suits by aliens if the divorce is based on mutual consent, or on a cause occurring after either party established residence in Cuba, or on a cause occurring before such residence if the same cause is recognized as a cause for divorce by the law of the country of which the parties are citizens. Before bringing the action the alien must have resided in Cuba at least one month; to prove such residence he must make a declaration before a notary stating his intention to be domiciled in Cuba, and after at least thirty days he must make another declaration stating that he has not left Cuba since the date of the first declaration.

Foreign divorce will be recognized if granted for a cause similar to those expressed in the Cuban law.

Limited divorce may be obtained for: (1) Adultery of wife or adultery of husband in a scandalous manner; (2) physical cruelty or grave insults; (3) violence exerted by husband to oblige wife to change religion; (4) attempt of husband to prostitute wife; (5) attempt to prostitute children of the marriage or connivance in their corruption or prostitution; (6) sentence to life imprisonment. At the request of either party a limited divorce may be converted into an absolute divorce. (Decree-law 739 of Dec. 4, 1934).

DOWER:

There is no right of dower. As to rights of widows, Descent and Distribution; Husband and Wife. There may be property set aside, donated or willed to the wife which is called dower.

ESTATES: See Real Property.

EVIDENCE: See Depositions.

EXECUTIONS:

Upon final judgment an attachment is issued against the property of the debtor. A valuation of the property attached is made by experts appointed by the parties and the judge. The property is thereupon advertised for sale. Bidders must deposit a sum equivalent to 10% of the valuation and no bid is received of less than two-thirds the valuation. If there is no bid the judgment creditor may request that the property be adjudicated to him for two-thirds of its

valuation or that a new sale be advertised at which the valuation shall be reduced 25%, also that the property be delivered to him for administration. If at the new sale there is no admissible bid and the judgment creditor does not ask for adjudication, he may request that there be a third sale advertised at which bids of any amount will be received. If the successful bid at the third sale is less than the valuation which was the basis of the second sale, the debtor has nine days to redeem. No right of redemption exists in any other case of judicial sale. (L. C. P. arts. 918-949, 1479-1529). In administration tax sales there is a right of redemption for two years.

The State has the right to bid without making a deposit, and in all sales of real estate under execution it has a preferential right to acquire the property at the price offered by the successful bidder. (Decree law 102 of Jan. 8, 1934).

Third parties may intervene to claim the ownership of the property attached or a preferential right to the proceeds, filing with their petition the document on which it is founded. In the former case the sale is suspended until the intervention is decided; in the latter, the proceeds of the sale are deposited in court until such decision. (L. C. P. arts. 1530-1541).

EXECUTORS AND ADMINISTRATORS:

A testator may appoint one or more executors. The office is voluntary, but the executor who declines or resigns without reasonable cause, loses whatever legacy or bequest may have been made him. After acceptance he must continue unless excused by the judge on reasonable grounds. The testator may define the duties of the executor. The executor must conclude his labors within one year from the date of his acceptance or from the termination of litigations relating to the will; the testator may provide a longer period, which may be further extended by the judge or the heirs and legatees. The office of executor is gratuitous unless the testator has fixed some compensation, but the executor may charge for his work in connection with partition proceedings and other work outside of his regular duties.

If for any reason there is no executor, the heirs are charged with the execution of the testator's wishes. Judicial intervention may be requested by an heir or creditor, and is necessary when there are absent persons without representation or minors not represented by their parents.

In case of intestacy the heirs may immediately take charge of the estate without judicial action, unless they include a minor or incapacitated person. In such case, or if there is no descendant, ascendant, surviving spouse or heir within the fourth collateral degree, or any such heirs are absent without representation, or if the heirs themselves request, the estate is placed in charge of the proper court which appoints a special executor to take charge of the funeral, and further appoints a depositary-administrator. The latter administers the estate, reporting to the court, and is entitled to a percentage of the income. To determine who are the heirs a simple court proceeding is held in which the public prosecutor is a party. The public prosecutor is also generally a party in testamentary, administration and partition proceedings in which minors or incapacitated persons are interested.

Creditors of decedents have the right to exact payment of their claims, but the period within which a creditor may enforce this right and the extent of the right depend on whether there has been an unqualified acceptance of the estate by the heirs or an acceptance subject to the making of an inventory. See Descent and Distribution.

In case of unqualified acceptance the creditor may present his claim at any time within the period of limitations. In this case the thing inherited becomes an integral part of the estate of the heir and he is obliged with respect to his co-heirs, creditors and legatees, to pay all debts and charges upon it, not only out of the inheritance which he has accepted, but also out of his own property. In case of acceptance subject to the making of an inventory, the heir is obliged to pay the debts of the decedent only from the property inherited. He has a period of ten days to determine whether he desires the making of an inventory, and 30 days if he lives in a place which was not the residence of the decedent. The inventory must be begun within 30 days and concluded within 60 thereafter. The heir thereupon has 30 days to decide whether he will accept or decline the inheritance. If an inheritance is accepted subject to inventory the property is placed under administration until the creditors and legatees are paid, the heir being entitled to the balance. Creditors may object to the partition of the estate until their credits are paid or secured.

(C. C. arts. 892-911, 1010-1087; L. C. P. arts. 958-1127).

EXEMPTIONS:

The articles exempt from execution are the bed of the debtor and of his wife and children, their necessary clothing and the appliances or instruments necessary for the debtor's art or trade. The property of railroads is also exempt, a special form of execution being provided as against railroads. (L. C. P. arts. 1446, 1447; G. O. 34 of 1902).

Fees of notaries and registrars are exempt, also salaries of Government and public service employees, also 90% of salaries and wages of other employees and the minimum wage in any case, with certain exceptions in suits for support, also pensions, postal savings and workmen's tools. (Decrees 279 of 1906, 2697 and 2701 of 1933, 741 of 1934; law Dec. 17, 1937).

FIDUCIARIES:

See Executors and Administrators; Trusts.

FORECLOSURE: See Mortgages.

FOREIGN CORPORATIONS: See Corporations.

FRAUDS, STATUTE OF:

See Public Instruments.

FRAUDULENT SALES AND CONVEYANCES:

Payments made by a bankrupt on unmatured debts within 15 days before the declaration of bankruptcy must be returned.

The following assignments made by a bankrupt within 30 days before the bankruptcy are considered fraudulent and void: (1) Gifts of real estate; (2) dowry endowments from his separate property; (3) conveyances of real estate in payment of unmatured debts; (4) mortgages to secure previous debts or loans not made at the time of the mortgage; (5) gifts of personalty in certain cases.

The following contracts may also be annulled on the petition of creditors: (1) Conveyances of real estate and dowry endowments from the community property, made within one month before the declaration of bankruptcy; (2) acknowledgments of receipt of money given within six months before the declaration of bankruptcy, unless the delivery of the money is proved, and certain endowments to wife or daughters within the same period; (3) all contracts made within ten days before such declaration; (4) all simulated contracts made within two years before the bankruptcy. Other contracts in fraud of creditors may be rescinded on the creditors' petition within four years.

(C. Com. arts. 878-885; C. C. arts. 1290-1299).

GARNISHMENT:

Property of a debtor in the hands of third parties may be reached by an order of attachment describing it. Pensions of employees cannot be attached and only 10% of their compensation can be. Salaries payable by the state, provinces or municipalities and by public service corporations cannot be attached, except for the payment of alimony. (Const., arts. 43, 61; Ley Const., arts. 43, 61; L. C. P., art. 1449, Decrees 279 of Dec. 20, 1906, 2697 of Nov. 11, 1933, and 2701 of Nov. 16, 1933).

HOLIDAYS:

National memorial days or holidays, in addition to Sundays, are: Jan. 1, Jan. 28, Feb. 24, May 1, May 20, Aug. 12, Sept. 4, Oct. 10, Oct. 12, Nov. 27, Dec. 7, Dec. 25. Courts, except correctional courts, also close from Dec. 25 to Jan. 6, and on Thursday and Friday of Holy Week. Courts, except correctional and municipal courts, also close on the day of reopening the collegiate courts in the beginning of September. Collegiate courts recess in July and August. It has become a general practice to consider Saturday

as a half holiday, but by law banks must close all day Saturday. If a holiday falls on Sunday, the following day becomes a holiday. (Law of Mar. 18, 1903; O. J. L., arts. 173-176; Decrees 170 of Apr. 24, 1934, 217 of May 18, 1934, 403 of Aug. 10, 1934, and others).

HOMESTEADS:

The head of a family who owns and cultivates rural property worth not over $2,000 may declare it as a homestead. not subject to taxes, attachment or alienation. (Const., art. 91; Ley Const., art. 91; Law June 18, 1943; Decree 507 of Mar. 9, 1944).

HUSBAND AND WIFE:

Husband and wife are obliged to live together and mutually help each other. Wife must follow her husband wherever he fixes his residence, but courts may exempt her from this obligation if he removes to a foreign country. The wife has the fullest equality with the husband with respect to her personal rights and in all matters relating to the children and property of the marriage.

Unless. otherwise provided in a prenuptial agreement, marriage is considered as a copartnership, in which the property brought into the marriage is treated differently from that acquired during the marriage, the latter belonging in equal parts to both spouses. The property of the marriage partnership comprises: (1) The property obtained by the labor, industry or wages of each spouse; (2) property purchased with money of the marriage partnership; and (3) the fruits, rents and interest obtained during the marriage from the separate property of each spouse. Property is presumed to belong to this marriage community unless proved to be separate property. The husband and wife together are the administrators of the marriage partnership property. Neither may alienate or encumber the marriage community property without the other's consent. The marriage partnership is dissolved by death or divorce or the annulment of the marriage, and in such case all property covered by it is divided equally between the spouses, except that in case of annulment, the party guilty of bad faith is entitled to no participation.

The property brought into the marriage by each party is considered as separate property. Each party may freely dispose of his or her separate property. Dower property, which is property set aside, donated or willed to the wife under that name, and paraphernalia which is other property brought into the marriage by the wife or given or willed to her, may be administered and disposed of by her without her husband's consent. Nevertheless, she may appoint her husband administrator of her separate property by public instrument duly recorded, but may at any time revoke such appointment.

The marriage partnership property is liable for the debts contracted during marriage by the husband and by the wife. It is also liable for minor repairs to the separate property and for the maintenance of the family and the education of the children. Debts contracted by the husband or wife before marriage are not a charge on the community property, unless the other charges on the property have been met and he or she has no separate property, but any amounts so paid are deducted at the final division of the community property.

A married woman may engage in business.

A Cuban woman marrying a foreigner does not lose her Cuban citizenship. A foreign man or woman marrying a Cuban citizen has the option of becoming a Cuban citizen or retaining his or her foreign citizenship.

(C. C., arts. 42-47, 1315-1344; Law of July 18, 1917; Law 9 of Dec. 20, 1950; Const. and Ley Const., arts. 16, 43).

INCOME TAX: See Taxation.

INFANCY:

(C. C. Arts. 50-3rd, 59, 154-172, 314-324, 1261, 1263, 1291, 1300-1301).

The age of majority is 21, but a minor may be emancipated by his parents or by marriage. Contracts by non-emancipated minors and some contracts by emancipated minors are voidable. Parental authority includes custody, legal representation and administration and enjoyment of the usufruct of the infant's property, with some exceptions.

INHERITANCE TAX: See Taxation.

INSOLVENCY: See Bankruptcy.

INTEREST:

Maximum interest rate permitted is 12% per annum. When no rate is specified the legal rate of 6% is applied. Overdue interest bears interest at 6% from the time suit is instituted. A debtor is not in default until demand is made judicially or extrajudicially, except when the contract or the law declare otherwise, or the nature and circumstances of the obligation indicate that time is of the essence. (C. C., arts. 1100-1110; Decree 2701 of Nov. 16, 1933).

Usury.—Interest stipulated in excess of 12% per annum cannot be recovered. Loan contracts acknowledging receipt of a larger amount than actually received, or otherwise tending to evade the law establishing the maximum interest rate, are void, this prohibition being rigidly construed. (Decree 2701 of Nov. 16, 1933; Decree-laws 473 of Dec. 23, 1935, and 770 of Apr. 4, 1936). Usury is also punishable as a crime.

INTESTACY: See Descent and Distribution.

JOINT STOCK COMPANIES:

See Corporations; Partnership.

JUDGMENTS:

Judgments do not operate as a lien on real property unless an attachment on real property is issued thereunder and annotated in the Registry of Property. (L. C. P., arts. 918-957).

Foreign Judgments.—Foreign judgments have the force provided by treaty or, if no treaty, the force which in the foreign country is given to Cuban judgments. If the courts of the foreign country have refused to carry out the Cuban judgments, the judgments of that country will have no force in Cuba. If none of the foregoing rules can be applied the foreign judgment will be enforced in Cuba if: (1) It was rendered in a personal action; (2) the defendant was not in default; (3) the obligation was legal in Cuba; and (4) the copy of the judgment is in legal form. The Supreme Court decides whether or not a foreign judgment should be executed by the courts of Cuba, unless otherwise provided by treaty. (L. C. P., arts. 950-957).

LABOR REGULATIONS:

See Master and Servant.

LEGISLATURE:

See Constitution and Government.

LIENS:

With regard to specific personal property, the following credits have preference: (1) Those for the construction, repair, preservation, or the price of personal property in the possession of the debtor to the extent of its value; (2) those secured by a pledge in the possession of the creditor with regard to the thing pledged and to the extent of its value; (3) those guaranteed by a security of goods in a public or commercial establishment with regard to such goods and for their value; (4) those for transportation with regard to the goods transported for the amount of such transportation and expenses until the time of delivery and 30 days thereafter; (5) those for board with regard to the personal property of debtors remaining in inns; (6) those for seeds and expenses of cultivation and harvesting with regard to the crops to which applied; (7) those for rentals for one year with regard to the personal property of the lessee on the estate leased.

With regard to specific real property the following credits have preference: (1) Those in favor of the government for the last tax due; (2) insurance premiums for two years with regard to the property insured; (3) mortgage and agricultural credits recorded in the registry of property; (4) credits recorded in the registry of property by virtue of judicial order, by reason of attachments or otherwise, only with regard to subsequent credits; (5) agricultural loans not recorded but only with regard to credits different from those mentioned in the preceding four numbers.

With regard to other personal and real property of the debtor, preference is given to: (1) Credits in favor of the province or municipality for the last annual tax; (2) credits for agricul-

tural advances; (3) credits due for judicial expenses of administration, funeral expenses, expenses of the last illness of the debtor, wages and salaries for the last year, advances for the maintenance of the debtor and his family for the last year, and advances for support during bankruptcy proceedings; (4) indebtedness which, without a special privilege, appears in a public instrument or in a final judgment.

(C. C., arts. 1911-1929).

Crop and Industrial Liens.—The Law of Mar. 2, 1922, and Law 5 of Dec. 20, 1950, authorize liens on crops, cattle, industrial equipment and machinery, under these contracts: (1) Cane planting contracts under which the possessor of an estate grants the right to plant cane, obtaining a lien on the cane; (2) cane grinding contracts made by a sugar mill with the owner or possessor of lands, obtaining a lien on the cane grown; (3) contracts for advances for agricultural and industrial purposes made by the Cuban Bank of Agricultural and Industrial Development. The debt for an agricultural advance may be guaranteed by mortgage or by pledge of securities or by a lien on articles forming part of the unit of production. The debt for an industrial advance may be guaranteed by mortgage or pledge of securities or liens on chattels. All such contracts must be registered in the registry of properties.

LIMITATION OF ACTIONS: See Prescription.

LIMITED LIABILITY COMPANIES:

See Partnership.

LIMITED PARTNERSHIP: See Partnership.

MARRIAGE:

The following conditions are a bar to marriage: (1) The fact that the male is under 14 or the female under 12 years of age, but their marriage is validated if they live with their spouse one day after attaining these ages, or if the female conceives; (2) mental incapacity; (3) patent and incurable impotency; (4) an existing previous marriage. Marriages cannot take place between the following: (1) Ascendants and descendants by consanguinity or affinity; (2) collaterals by consanguinity to the second degree; (3) an adopting parent or his or her surviving spouse and the adopted child or his or her surviving spouse; (4) persons convicted for the murder of the spouse of either of the two parties. The following are prohibited from marrying: (1) Minors under 21 years who have not obtained the necessary consent; (2) widows, divorced women and women whose marriages have been annulled, during the period of 301 days after the death of the husband or separation by judicial order, or, if left pregnant, during the period preceding the birth; (3) guardians and their descendants, with their wards, until the accounts of the guardianship are approved. Marriages contracted in spite of the three prohibitions last mentioned are valid, but no marriage community property is created (see "Husband and Wife") and the parties cannot receive any property from each other by gift or will.

The state recognizes only the civil marriage ceremony performed by the municipal judge or by a notary public. A religious ceremony without an additional civil ceremony is ineffective.

(C. C., arts. 42-55, 83-103; G. O. 140 of May 28, 1901; law of July 29, 1918).

MARRIED WOMEN:

See Dower; Executors and Administrators; Husband and Wife; Marriage.

MASTER AND SERVANT:

The Constitution contains important labor legislation. (Const., arts. 60-86; Ley Const., arts. 60-84).

The Ministry of Labor has general supervision over the execution of labor legislation. (Decrees 522 of 1933 and 276 of 1934). Workmen must be paid in money and cannot be paid in tokens. (Const. and Ley Const., art. 64; Law June 23, 1909; Decree 3185, Nov. 8, 1940).

Syndicates.—Workmen and employers of the same or connected occupations, except in state and municipal employ, may form syndicates or unions, which must have at least 25 members in the case of workmen and three in the case of employers. Only Cuban citizens able to read and write may be syndicate members. The Minister of Labor may designate a delegate to be present at syndicate meetings. (Decree 2605 of 1933).

Strikes and Lockouts.—The right of workmen to strike and of employers to form combinations is recognized, but before action is taken eight days notice must be given to the Ministry of Labor, which will appoint a local committee of social cooperation, formed of three representatives of the workmen's syndicate and three of the employer and presided over by an official of the Ministry. The local committee must promptly investigate and render its decision, from which appeal may be taken to the National Commission of Local Cooperation, formed of representatives of the Government, the workmen and the employers. The decision of this body, however, is not binding unless it admits the demands or declares them illegal. General strikes are illegal when the same complaints do not exist in all sections and in addition the strike would jeopardize the safety of the inhabitants because of lack of light, water, telephone, telegraph, medical assistance, fire fighting services and transportation. (Decree-law 3 of 1934; Decree 622 of 1939; Decree 827, March 17, 1943; Decree 1667, June 14, 1944).

Eight hour day is in effect, with a maximum of 44 hours per week with 48 hours wages. The provision does not apply to domestic servants, and there are various exceptions, principally with respect to agricultural laborers. (Decrees 1693 and 2513 of 1933; Decree 3185, Nov. 8, 1940).

Vacations.—Employees and workmen are entitled to one month vacation with pay in every year. (Law 40 of 1935; Decree 2530, Sept. 13, 1941). Domestic servants are entitled to four free days per month. (Decree 2174 of 1938).

Minimum wage legislation provides for a National Minimum Wage Commission composed of officials of Ministries of Labor, Commerce and Agriculture, and of employers and workers, appointed by Minister of Labor, which Commission publishes resolutions designating minimum wages in different industries. (Decree-laws 727 of 1934, 18 of 1935; Decree 1104, April 21, 1942). There are also numerous resolutions regulating minimum wages in specific occupations.

Women and children are protected by various enactments. Women must be preferred for positions for which they are specially fitted, such as positions in stores selling feminine apparel, and rest rooms must be provided for women employees. (Decree 2303 of 1925). Women may not work at night in industrial establishments, nor may they be employed in dangerous or unhealthy occupations. (Decree-law 598 of 1934). They may absent themselves from work six weeks before childbirth and may not be employed in industrial or commercial establishments until six weeks after childbirth; during this time they cannot be discharged and are entitled to benefits from a maternity fund (Decree 1300, April 25, 1942); they must be allowed time to nurse their infants (Decree-law 781 of 1934). Minors under 18 may not be employed in night work with certain exceptions, nor in dangerous or unhealthy occupations; minors under 14 and those under 18 who lack elementary instruction may not be employed in any industrial enterprise. (Decree-law 647 of 1934). The working day of minors under 18 cannot exceed seven hours. (Law 53 of 1935).

Workmen's compensation act (Decree 2687 of 1933) applies to workmen and employees in industrial and commercial enterprises, but not to agricultural workers or domestic servants. It covers injuries suffered in connection with or consequent on the work, as well as vocational diseases. The employer is liable for all such injuries and must insure against them. The indemnity in case of permanent total disability is two-thirds of the annual salary, calculated at not over $1,500 per annum; in case of temporary incapacity it is one-half the salary during such incapacity, not exceeding one year; in case of death the surviving spouse or dependents are entitled to a pension equivalent to a percentage of the salary of the deceased. Such indemnity and pension are not subject to attachment. Accidents must be reported to the municipal judge who makes an investigation, and the decision as to the amount payable is rendered by the municipal judge or the judge of first instance, according to the amount involved, with the right of appeal to the higher court.

Labor hygiene is regulated in great detail by Decree 2318 of July 5, 1948, am'd by Decree 1411 of Apr. 27, 1949.

Labor exchanges are established in the various provinces, through which all personnel must be engaged. Employers must keep the exchange informed of their personnel and of the appointments and vacancies therein. (Law 148 of 1935).

Nationalization of Labor.—Decree 2583 of 1933 required that in all agricultural, industrial and mercantile establishments then in existence at least 50% of the employees and workmen must be native Cubans and they must receive at least 50% of the amounts payable to personnel. All vacancies must be filled by the appointment of Cuban citizens. The direct representatives of the employer are excepted, as well as technical positions but these only when there are no Cuban citizens qualified to take them.

MINES AND MINERALS:

Minerals and mining concessions are governed by the mining decree of Dec. 29, 1868, as amended, and by various presidential decrees, principally decree No. 869 of Sept. 28, 1914.

The law distinguishes between: (1) the "soil" which reaches as far downward as may be required by the owner of the surface for building purposes or otherwise; and (2) the "subsoil." The soil may be the subject of private ownership, but the subsoil belongs to the state which may grant the enjoyment thereof in accordance with the mining law.

Mineral substances are divided into three classes: (1) building materials, such as stones, slates, etc.; (2) various earthy and other substances, such as ocher, phosphates, fluorspar, kaolin, etc., and (3) minerals properly so called. Substances comprised in the first class may be freely exploited by the owner of the soil. Those in the second class may also be exploited by the owner of the soil, but if he fails to do so the state may grant the exploitation to others. Substances of the third class can be exploited only under a concession from the state granted either to the owner of the soil or to others.

Mining concessions comprise not less than four surface units 100 meters square. For the purpose of obtaining a concession, application is made to the governor of the respective province; notices are published in the official newspaper; there is a survey by Government engineers; the matter is submitted to the Ministry of Agriculture; the President of the Republic issues a decree approving the application; and the governor of the province thereupon issues the title to the mine. Owners of mining concessions may utilize such part of the surface as is required for their operations, resorting to expropriation if necessary, the owner of the surface being entitled to indemnity.

Combustible Minerals.—(Law of Combustible Minerals of May 9, 1938; Regulations Dec. 2625 of Oct. 16, 1954; Decree-law 1526 of July 8, 1954 am'd by Decree-law 1868 of Dec. 22, 1954).

For a five-year period commencing with the effective date of Decree-law 1526 of July 8, 1954 concessionaires able to begin commercial exploitation can request a ten-year extension to the 30-year term of their concession, paying therefor during the additional years a royalty at the rate of 20% (except that in certain areas the royalty rate is 10%). Certain reductions on corporate income tax, tax on shares, tax on capital, and transfer taxes are allowed to persons who prove that they are financially able to carry out drilling operations at depths of at least 4,000 feet. Additional benefits include reduction by 50% of recording fees in the Mercantile Register and Register of Corporations. Persons who receive such benefits must undertake to continue drilling until petroleum is found or certain depth reached. Several government banks are authorized to make loans to such persons on favorable terms designated in the law on condition that the borrower prove that it has funds available totalling 150% of the amount borrowed and that the funds loaned plus 90% of available capital be used for drilling and related activities.

Construction and operation of refineries in Cuba is encouraged by Law-Dec. 1758 of Nov. 2, 1954 which provides special treatment for a minimum period of 20 years from the effective date of the law. The benefits, which include reduced import duties and reduction of or exemption from other taxes, are available only to entities establishing new refineries or doubling at least the capacity of existing refineries. Deposits of petroleum, coal and other hydrocarbons may be exploited under concessions from the state, granted at the discretion of the Executive. Concessions may be acquired by Cuban individuals or companies, and by foreign individuals or companies domiciled in Cuba. They may be for exploitation alone or for exploration with the right to choose exploitation concessions in the zone granted.

The area of concessions is measured by units of 40,000 square meters, called pertenencias. No concession may contain less than four contiguous pertenencias, forming right-angled polygons whose sides are multiples of 200 meters. Exploration concessions may not contain over 8,000 pertenencias and exploitation concessions not over 2,000. No one may own concessions of a total area exceeding 75,000 pertenencias. In all concessions eight lots of approximately equal size must be marked out: one is chosen by the concessionaire, one by the Government, and the others go to the concessionaire.

Petitions are filed with the Provincial Government. Exploration concessions run for three years and are subject to an annual tax of 5 centavos per hectare. Within this time the concessionaire has the exclusive privilege of requesting exploitation concessions in the area granted. The necessary surface rights may be obtained by expropriation. Exploitation concessions run for 30 years. An initial tax of 5 pesos per hectare is payable. Thereafter the annual surface tax payable by every owner of an exploitation concession is 5 pesos, 15 pesos and 20 pesos per hectare respectively, for the first, second and third ten-year periods. These annual rates can be reduced to 10 cents, 20 cents and 40 cents per hectare, respectively, if the concessionaire agrees to deliver to the State as government reserves one-eighth of the area of his concession and further agrees to limit his concession to a 30-year life. In addition, a royalty of 10% of the net production is payable to the Government, which is reduced to 9% for petroleum refined in Cuba, as well as a royalty of 1% of the gross production to the owner of the surface.

Minimum work requirements for owners of concessions for exploiting petroleum, naphtha or natural gas, under penalty of nullity of their concessions, are as follows: for concessions granted prior to 1938: owner of 6,000 or more pertenencias must drill every 5 years one well for each 6,000 pertenencias or fraction thereof owned; owners holding 3,000 to 6,000 pertenencias must drill one well every 6 years; owners holding 1,000 to 3,000 pertenencias must drill one well every 7 years; owners holding 200 to 1,000 pertenencias must drill one well every 8 years and owners of 200 pertenencias or less must drill a well every 10 years; for concessions granted after 1938: one well must be drilled every 5 years by each concessionaire regardless of pertenencias owned, but owners of less than 2,000 pertenencias in a single field may join to drill one well every 5 years and so satisfy the minimum work requirements for each of them. Drilling must continue without interruption until commercial production is obtained, until 4,000 feet depth is reached, or until rock formations which make further drilling useless are encountered. Commercial production is defined as a daily yield of 20 cubic meters (122.4 barrels) average during the first 30 days. Exploitation must begin within two years after the concession is issued, under penalty of paying 50 centavos per hectare per quarter, and it may not be suspended for over one year.

MONOPOLIES AND RESTRAINT OF TRADE:

Monopolistic activities are illegal and numerous provisions regulate the price of articles of necessary consumption. (Const., art. 276; Ley Const., art. 249; Penal Code, art. 556; Decrees 1473 of May 10, 1939, and 1366 of May 13, 1942).

MORTGAGES:

The provisions of law relating to mortgages are found in the mortgage law and regulations and in C. C., arts. 1874-1880.

Mortgages must be executed before a notary public in the form of a public instrument.

The property must be described in detail and in case of several parcels included in one mortgage the formal requirements must be complied with separately for each parcel. The mortgage must state for what amount each parcel is

mortgaged and the value at which the parties estimate each parcel or property. Provision for costs of foreclosure should be made. Although the law of trusts in the American sense is not found in the Spanish law, yet for the purpose of corporate mortgages the same effect can be had by proper language in the mortgage in order to secure issues of bonds. Mortgages must be recorded in order to be valid and effective against third persons.

Only real property and rights in rem can be mortgaged. Rights in a mortgage can in turn be mortgaged. Easements, except as to water rights, can be mortgaged only in connection with the dominant estate. A mortgage covers all objects permanently connected with the realty, improvements made on the realty while the mortgage is in force, overdue and unpaid rents, payments to the owner on account of insurance or expropriation, and fruits pending when the mortgage falls due, unless such objects or fruits are encumbered by a crop or industrial lien.

For the foreclosure of mortgages there is a summary form of executory action. A copy of the mortgage and a certificate from the registrar of property showing it to be in force are filed in court, whereupon a judicial order is issued and served on the debtor giving him a period of thirty days to make payment. If he fails to do so, the court orders the property sold at public auction. Notices are published and on the date set the property is sold to the highest bidder, but no bid is accepted which is less than two-thirds of the amount designated as the value of the property in the mortgage instrument. If no such bid is received a second sale is advertised, at which the property is deemed to be valued at 25% less and the lowest bid must cover two-thirds of such valuation. If there is still no bid, a further sale may be held at which lower bids are admissible. Nevertheless, the minimum bid can in no case be less than the amount of prior encumbrances. The state has the same right to bid as in case of sale under execution. See Executions.

No right of redemption is reserved to the debtor.

A mortgage creditor cannot proceed against property of the debtor other than that specifically encumbered. (Decree-law 490 of Jan. 7, 1936). Agreements to make mortgage debt payments outside of Cuba cannot be enforced. (Decree-law 770 of Apr. 4, 1936).

MOTOR VEHICLES:

There is a national license tax collected by municipalities.

Traffic regulations are contained in Decree-law 2037, Jan. 27, 1955 as am'd.

Tourists' automobiles are exempt for not exceeding 180 days from date of arrival. A declaration must be signed, on which a special permit is issued. (Decree 2549 of Oct. 18, 1935; Decree 3021 of Dec. 20, 1946; Treasury Res. of Jan. 10, 1947).

Aircraft are subject to rules considerably simpler than those relating to maritime commerce. (Decrees 548 of Apr. 21, 1928, 115 of Jan. 15, 1929; Decree-law 751 of Apr. 4, 1936; Decrees 752 of Mar. 13, 1943, and 2366 of Aug. 18, 1943).

Cuba signed the Chicago Convention on International Civil Aviation on Apr. 5, 1945, and ratification was deposited in Washington on May 11, 1949, effective as of June 10, 1949. Law-Decree 59 of May 9, 1952, adopted the documents required by the Chicago Convention for the transit of aircraft, passengers, luggage and cargo. Decree 2449 of July 10, 1951, issued regulations governing the Cuban Civil Aeronautic Board. Commercial transportation by domestic and foreign carriers is subject to regulations in Decree 1001 of Apr. 19, 1956.

Special orders regulate particular subjects, such as certificates of registration and airworthiness, qualifications of aviation mechanics, instrument flying, night flying, etc.

NEGOTIABLE INSTRUMENTS:

See Bills and Notes.

NOTARIES PUBLIC:

(Notarial Code of 1929; Law Dec. 17, 1937).

Notaries are public officials whose duties are much more important than those of notaries under the American law. They must be lawyers or have obtained a university degree as notary, must give bond, and must usually qualify by examination.

They are under the general supervision of the Audiencia of their district and of the Association of Notaries and the Ministry of Justice. There is a limited number of notaries for each notarial district; the proportion cannot exceed one to every four thousand inhabitants. Their records are semi-public. The original documents executed before a notary remain in his possession and constitute his protocol, which is bound into volumes. When a person ceases to be a notary his records are delivered to his successor, but records more than 30 years old are kept in a general office of protocols in each notarial district.

Instruments executed before notaries must be prepared with certain formalities and drawn in the Spanish language. The notary must set forth the name and surname, place of birth, nationality, legal age, civil status, profession or occupation and domicile of each of the parties. He must certify that he knows the parties, except in cases of protests of commercial paper, or that they were identified by two witnesses known to him, also, that in his opinion they have legal capacity. It must appear that he read the instrument to the parties or that they read it. If parties do not know Spanish they must appoint an interpreter to sign with them. The notary may be the interpreter if he knows the language of the parties.

Instruments other than wills do not require witnesses if all the parties are known to the notary, but at the request of any party two witnesses may sign. Parties to a notarial instrument and other persons who derive an interest therefrom are entitled to receive formal certified copies which have the effect of originals and may be presented in court. Copies may also be issued on court order.

Notaries are empowered to perform the marriage ceremony. They may also discharge judicial functions in certain ex parte and uncontroverted proceedings, such as opening of closed wills, and protocolization of holographic wills.

Commercial brokers have the character of notaries in mercantile transactions and are known as commercial notaries. They must be members of a local brokers' association, give bond and obtain a governmental certificate. They must keep a register of the transactions in which they intervene. Their certificates are accepted in court. (C. Com. arts. 88-115).

PARTNERSHIP:

(C. Com., arts. 15, 21, 116-150, 218-238; C. C., arts. 1665-1708).

Partnerships are considered as legal entities. Before doing business the partnership agreement should be drawn up in a public instrument, executed before a notary public, and should be recorded in the mercantile registry.

Unlimited partnerships (Compañías Colectivas) are partnerships in the usual form in which all the partners have unlimited and joint liability. Such a partnership must act under a firm name which must include the names of all the partners or one or more followed by the words "y Compañía," commonly abbreviated to "y Cía." The name of no person not a partner can appear in the firm name. The partnership agreement must express: (1) the name and domicile of the parties; (2) the name of the partnership; (3) the names of the managing partners who may use the firm name; (4) the amount of the capital contributed by each partner; (5) the term of the partnership; (6) the amounts assigned to the managing partners for expenses; (7) any other lawful agreements. The management of the business may be placed in the hands of one or more partners, otherwise all have a voice in the management. Without express agreement no partner can on his personal account engage in the same kind of business as the partnership.

Limited partnerships (Compañías en Comandita) are partnerships in which one or more of the partners are subject to unlimited and joint liability for the partnership obligations and one or more of the partners are not responsible for debts and losses except up to the amount of the capital they have subscribed. The name of the partnership must include the name of one or more of the unlimited partners; if the names of all the unlimited partners do not appear the words "y Cía." must be added. The names of the

special partners must not appear in the firm name. The firm name must always conclude with the words "Sociedad en Comandita," generally abbreviated to "S. en C." The special partners have no voice in the management of the company and are entitled to examine into the conduct of the business only in accordance with the provisions of the partnership agreement or when the annual balance is submitted. The capital belonging to the special partners may be represented by shares. Many provisions relating to unlimited partnerships are applicable to limited partnerships.

Civil partnerships are partnerships formed for entirely non-commercial purposes. They are governed by special provisions of the Civil Code. They may have any of the forms of commercial companies, but the partners are not individually liable for partnership debts.

Foreign partnerships may do business in Cuba upon filing in the mercantile registry a certified copy of their articles of co-partnership, protocolized in a Cuban notary's office, and in addition a certificate from the Cuban Consul stating that the partnership has been organized in accordance with the law of its domicile.

Limited liability companies (Sociedades Limitadas) are companies having some of the characteristics of a corporation and some of a partnership. They must consist of from two to ten members, all of whom have limited liability. The name must be followed by the words "Sociedad Limitada." The amount of the capital cannot be less than $5,000 and must appear on all the company's publications. The members cannot assign their shares without the consent of two-thirds of the members, representing two-thirds of the capital. Such companies are administered by managers. (Laws of April 17 and Dec. 13, 1929).

PATENTS:

(Decree-law 805 of Apr. 4, 1936).

Patents may be obtained by application to the Department of Commerce and may cover: (a) Apparatus, machines, devices, implements and mechanical or chemical processes which are new and whose object is to obtain an industrial product; (b) new industrial products; (c) a new variety asexually reproduced, except plants reproduced by means of bulbs. No patents can be issued on: (1) Ideas not translated into exploitable reality; (2) change of form, dimensions, proportions or matter unless they essentially modify the properties of the object; (3) application of devices of one industry to another; (4) inventions manifestly lacking novelty; (5) theoretical principles of speculative character; (6) commercial or financial plans or systems; (7) products obtained directly from land or from animal or vegetable kingdom.

A patent is granted for 17 years. The fee is $35. A foreign patent may be filed in Cuba and a confirmation patent obtained thereon which will expire when the foreign patent expires in the country of origin, but not later than 17 years from issuance. An invention patented abroad and not filed in Cuba within three years may be the object of a special patent expiring when the patent on which it is based expires in the country of origin, but in not over ten years.

Patentees must prove the exploitation of their patent in a period of three years, subject to three extensions of one year each. Patents become void if their owner ceases to exploit them for more than one year and one day, unless he can prove circumstances beyond his control.

Rights derived from a special patent will not prevail against a prior user, seller or exploiter of the invention sought to be covered. (Decree 1220 of Apr. 11, 1949).

PERPETUITIES:

A testator may direct that property pass to a third person beyond the immediate devisee or legatee, provided that it do not pass beyond the second degree, or that the ultimate devisee or legatee live at the time of the testator's death.

Perpetual money charges cannot be imposed except in favor of the state, province, municipality, public institutions, or private charitable institutions. The heir may capitalize the encumbrance. (C. C., arts. 781-788, 1604-1664; Const., art. 93).

PLEDGES:

Pledge contracts are not effective unless the object pledged is delivered to the creditor or to a third person agreed upon by the debtor and creditor. In order to be effective against third parties they should appear in a public instrument. (q. v.). However, the object pledged may remain in possession of the owner, if the pledge is made to secure the unpaid balance of its purchase price or to secure a bank credit or loan. In such event the pledge must be recorded in the mercantile registry or the registry of properties.

Upon the maturity of a debt secured by pledge the creditor may proceed with the intervention of a notary to sell the pledge at public auction upon notice to the debtor and to the owner of the pledge. If no sale is made at the first auction, a second one may be held, and if there is still no purchaser, the creditor may take over the pledge, giving a full discharge of the debt. There is no right of redemption. If the pledge consists of listed securities, the sale is made through the brokers' association.

(C. C., arts. 1857-1873; C. Com., arts. 320-324; Law 5 of Dec. 20, 1950).

PRESCRIPTION:

The acquisition of property or rights by virtue of possession and the extinction of obligations by failure to require performance are called "prescription." Prescription can be waived as far as it has run, but no waiver can be made of future prescriptive periods.

Ordinarily, in order to acquire by prescription, it is necessary to possess: (1) In good faith; (2) under lawful title; (3) in the character of owner; (4) publicly and quietly; and (5) without interruption. Good faith consists in the belief that the person who transmitted was the owner and entitled to transmit. Lawful title is title sufficient to transfer ownership. Natural interruption exists when possession ceases for one year, civil interruption is produced by judicial demand. For real property the prescriptive period is ten years as against persons living in the country and twenty years as against persons living abroad. Real property may be acquired by prescription in thirty years without need of title nor good faith. The ownership of personal property is acquired by possession for three years with good faith or six years without any other condition, but stolen property cannot be acquired by prescription by the guilty parties, unless the time for bringing criminal action has expired.

The prescriptive periods in which the right to enforce an obligation is lost vary according to the nature of the action. The more important are: (1) Actions to recover real property, 30 years; (2) actions to enforce mortgages, 20 years; (3) ordinary personal actions for which no other period is specified, 15 years; (4) actions to recover personal property, six years; (5) actions to recover pensions, rents and payments to be made annually or at shorter intervals, five years; (6) actions on bills of exchange and other commercial paper, whether protested or not; actions arising from loans on bottomry or marine insurance; and actions to recover compensation due to attorneys, teachers, agents, employees, innkeepers, storekeepers, etc., three years; (7) actions to recover or retain possession, or arising out of repairs to vessels, delivery of freight and various other maritime contracts, one year; (8) actions relating to collection of freight charges, contribution of general average, etc., six months.

The prescription of actions is interrupted by suit, by extrajudicial demand of the creditor and by any act of recognition of the debt by the debtor.

(C. C., arts. 1930-1976; C. Com., arts. 942-954).

PRINCIPAL AND AGENT:

For most purposes powers of attorney should appear in public instruments executed before a notary and should be detailed and explicit regarding the powers conferred. The powers of attorney should be drawn up with great care and the authority of the persons granting the power must appear with the greatest clearness, as the Cuban courts have adopted extremely technical and limited interpretations on this subject. Attorneys-at-law must have a power of attorney in order to conduct litigation. Provision should be made in the power of attorney for a substitution of the power and for the revocation of substitutions.

Except where a writing is specifically required by law, a power of attorney may be either written or verbal. It must be in the form of a

public instrument for purposes of administration or litigation or to be used in court or in connection with a public instrument, or for any act which would require a public instrument. Powers of attorney may be general or special. A general power of attorney merely covers acts of administration. In order to make compromises, agree to arbitration, alienate, mortgage or execute other acts of ownership, the power to do so must be specifically granted in a public instrument. Powers of attorney are not perfected until accepted, but the acceptance may be express or tacit.

An agent is required to adhere to the instructions of the principal, and, if there are none, to proceed in a prudent manner. He must account for everything he receives for the principal. He may delegate his powers if not expressly prohibited from doing so, but is liable for the acts of the substitute if there was no authority to make the delegation or if his appointee is notoriously incompetent. Unless expressly agreed otherwise agency is presumed gratis, except where the agent's usual business is to do the kind of work entrusted to him.

The principal must reimburse the agent for his expenses and indemnify him for losses suffered by reason of the agency. The agent may retain goods of the principal as a pledge for such payments.

Powers of attorney are terminated by: (1) Revocation by the principal; (2) resignation of the agent; (3) death, loss of civil rights, bankruptcy or insolvency or principal or agent. In case of resignation the agent must continue acting until the principal can take the necessary steps. Acts of the agent realized in ignorance of circumstances causing the termination of the agency are valid. Acts of a factor representing a mercantile house bind his principal though effected in violation of instructions, if they relate to matters comprised in the usual business of the house or if expressly or tacitly approved.

Persons presuming to act for others without authority are personally liable to the person for whom they presume to act; if such person ratifies or takes advantage of what they have done, the relation becomes that of principal and agent.

(C. C., arts. 1709-1739, 1888-1894; C. Com., arts. 244-302).

PUBLIC INSTRUMENTS:

Documents executed before a notary public, and documents issued by public officials in the exercise of their duties, are public instruments; also certain other documents, such as documents in the public archives, birth, marriage and death certificates, court orders of all kinds, etc. Other private writings are private instruments. Public instruments constitute proof of the date of their execution and of the object for which they purport to be made, and, as between the parties, of the facts stated therein.

Public instruments are null: (1) If signed before a notary outside of his district except in special cases; (2) if the notary does not certify that he knows the parties or that they have been identified by witnesses known to him; (3) if the signatures of the parties or of the notary do not appear, or the signatures of the witnesses when necessary; (4) if the witnesses, when necessary, are insane, blind or otherwise incapacitated according to law. Provisions in favor of the notary or his relatives to the fourth degree of consanguinity or second of affinity are invalid.

Documents certified by notaries are received as evidence in the Audiencia of their district; in order to be used in other districts their signature must be authenticated by two other notaries. (See Notaries Public).

As to third parties a private instrument is considered as executed only from the date on which the instrument was filed in a public registry or from the death of one of the signers, or from the date on which it was delivered to a public official by virtue of his office.

The principal contracts which should appear in public instruments are: Contracts for the creation, transfer, modification or extinction of rights in real estate; leases for one year or more; marriage settlements; assignments of inheritance rights; assignments of rights issuing from a public document; powers of attorney for administration or litigation or to be used in court or in connection with a public document.

Contracts involving over $300 should be in writing. It is to be noted that as between the parties a contract exists from the moment acceptance is given, if the essentials of the contract are present, namely: (1) Mutual consent; (2) definite legal object; and (3) consideration. Where a contract has been made which requires a written or public instrument, the parties may compel each other to execute the necessary document.

(Civil Code, arts. 1216-1230, 1254-1314; Notarial Code, arts. 115-130).

REAL PROPERTY:

Practically the same distinction exists between real and personal property as in the United States, but real property in Cuba sometimes includes objects considered personalty in the United States. The following are considered real property (Civil Code, art. 334): (1) Lands, buildings, roads and constructions attached to the soil; (2) trees, plants and pending fruits while attached to the land; (3) everything permanently attached to real property so that it cannot be separated without breaking or deterioration; (4) statues, paintings or other objects of use or ornament placed in such manner as to reveal the intention to make them a permanent part of the realty; (5) machinery, containers, instruments and tools required by the owner of the property for the industry or manufacture carried on therein; (6) beehives, dovecotes, fishponds and similar objects if attached to the property in a permanent manner; (7) fertilizer on lands where it is to be used; (8) mines and quarries while the materials remain attached to the deposit, and still and flowing waters; (9) dikes and floating constructions destined by reason of their object to remain at a fixed point of a body of water; (10) administrative concessions for public works, easements and other real rights on real property.

The owner of real property owns the surface and whatever exists thereunder subject to easements and to the provisions of the mining law, the law of waters and police regulations. See Mines.

Titles to real estate in Cuba are generally good in the western provinces and often defective or complicated in the eastern provinces where they are made more confused by the forms of old grants, and especially by a system of ownership in common, known as "haciendas comuneras." The law provides means of simplifying and clearing titles.

RECORDS:

The following documents must be recorded in the registry of properties: (1) Documents conveying or declaring the ownership of real property and real rights; (2) instruments constituting, recognizing, modifying or extinguishing rights of usufruct, mortgage, easement and other rights in real estate; (3) documents or contracts adjudicating real property or real rights; (4) judgments declaring legal incapacity to administrate, or the presumption of death of absent persons, or the loss of civil rights, or any other condition modifying the civil capacity of persons to dispose of their property; (5) leases for a period of more than one year or in which there is an express agreement to record.

Attachments and judgments relating to real estate and notices showing the institution of suits relating to real estate may also be recorded. Crop liens are recorded in the registry of property.

Documents recorded in the registry are notice to third parties only from the date of registration. No deed of conveyance or mortgage of real estate can be recorded unless the grantor appears as owner of record. A special and simple procedure is provided for the first registration of unrecorded property. In such case the owner may prove his title in court and have it recorded or, if his proofs are insufficient, he may prove the fact and time of his possession and have a record made thereof, leaving the title to ripen into a full ownership title by prescription.

The registrars are semi-judicial officers who do not transcribe the entire document, but only the essential details. On receiving an instrument they examine it to ascertain whether it is in legal form, contains all the data required by law, and the right of the grantors to execute the document appears sufficiently. If objections are found a period of time is allowed to cure the **defects and in some cases registration may be**

refused at once. From the decision of the registrars an appeal lies to the courts.

Registrars are appointed on competitive examination. They must be attorneys and give bond and are personally liable for wrongful or negligent acts. Their fees are fixed by law. They are under the general supervision of the Department of Justice.

Besides the registries of real property there are commercial registries, where certain instruments and data relating to merchants, corporations, etc., are required to be recorded, also the ownership, conveyance, and encumbrances of vessels. There are also local civil registries for recording births, deaths and other data relating to civil status and a general registry of wills and of declarations of heirship.

(Mortgage law and regulations; C. Com., arts. 16-32; C. C., arts. 325-332; Decrees 2262 of 1936, 1085 of 1939, 1915 of 1940).

REDEMPTION: See Mortgages.

REPLEVIN:

In actions to recover personal property from the possessor thereof, the regular attachment proceedings are applicable. (See Attachment). Intervention suits may be brought to claim attached property. See Executions.

REPORTS:

Important decisions of the Supreme Court are published in the Official Gazette. Full extracts of decisions are privately published.

SALES:

Contracts of sale, whether of real or personal property, are subject to the general provisions of the law relating to contracts and public instruments, and to the special rules provided in the Civil and Commercial Codes. By a contract of purchase and sale, one party agrees to deliver a specified thing and the other to pay a specified price in money or otherwise. The sale is perfected and binding on the vendor and vendee, if they have agreed upon the thing sold and upon the price thereof, though neither has been delivered. The determination of the price cannot be left to the judgment of one of the parties. The expense of the execution of the instrument is for the account of the vendor, and the cost of the first copy and other expenses subsequent to the sale are chargeable to the vendee, unless agreed otherwise. Sales of real property must be recorded, but there is no provision for recording sales of personalty.

Husband and wife cannot sell property to each other, unless separation of property has been agreed upon or there is a judicial separation of their property. The cost of the delivery of the thing sold is borne by the vendor, and that of its removal by the vendee. The vendor is not bound to deliver the thing sold if the vendee has not paid the price or a period for the payment has not been fixed in the contract, nor need he deliver it when, after the sale, it is discovered that the vendee is insolvent.

If a sale of real property is made with a statement of its area at a certain price for a unit of measure, the vendor must deliver the entire area sold; if the area is found to be less than that stipulated, the vendee may demand a proportionate reduction in the price, and if the difference exceeds 10% he may rescind the contract. If a greater area is found, the vendee need pay no excess, unless the difference exceed 5%, in which case he may choose between paying the greater value or withdrawing from the contract. If the sale is made for a fixed price, it is not affected by the greater or less area which may be found.

If the same thing is sold to different vendees, it belongs to the person who first takes possession in good faith if it is personal property, and to the person who first records it in the registry if it is real property. Unless there is a stipulation to the contrary, the vendor guarantees to the vendee (a) the legal and peaceful possession of the thing sold, provided that the vendee notifies him promptly of the institution of a suit against the vendee, and (b) that there are no hidden defects therein. In the sale of real property, though it was stipulated that the failure to pay the price within a certain time will produce the rescission of the contract, the vendee may pay even after the expiration of the period, unless he has been summoned judicially or by notarial act. With regard to personal property, the rescission of the sale takes place for the benefit of the vendor when the vendee does not appear to receive the property at the time fixed and does not offer the price at such time. Sales of property with a condition of reversion are forbidden.

When a co-owner of a thing held in common sells his share to a third party, the other co-owners have the right to redeem within nine days. When a rural estate of not exceeding one hectare is sold, the owners of the adjoining lands have a similar right of redemption.

A purchase and sale of personal property for the purpose of resale in order to derive profit, is considered commercial, except in the case of sales by farmers of their crops or cattle or by manufacturers of the article manufactured by them. In commercial sales, if the vendor does not deliver the goods at the time stipulated, the purchaser may demand the full amount or rescission of the contract, with damages in either case. He is not obliged to receive part of the merchandise purchased, but if he accepts partial delivery, the sale is consummated with regard to the goods received. The loss or impairment of the goods before delivery without the fault of the vendor entitles the purchaser to rescind the contract. If the purchaser refuses, without just cause, to receive the goods bought, the vendor may demand the fulfillment or rescission of the contract, but in the former case he must deposit the merchandise to the order of the court. Losses suffered by merchandise after the same is at the disposal of the purchaser, fall upon the purchaser, except in cases of negligence of the vendor. The purchaser who, at the time of receiving the merchandise, carefully examines the same, has no right of action against the vendor for defects in the quality or quantity of the merchandise. He has a right of action for defects of merchandise received in bales or packages but must bring his action within four days following the receipt of the packages. In such case, he must choose between the rescission of the contract or its fulfillment, with damages in either case.

(C. C., arts. 1445-1537; C. Com., arts. 325-345).

Conditional Sales.—The Supreme Court has upheld the validity of sales under which seller retains title until purchaser has paid full purchase price.

SEALS:

Seals are not used by private persons. Public instruments executed before notaries take the place of sealed instruments.

SEQUESTRATION:

When personal property is attached, it is deposited with a reliable person or establishment. In suits for the recovery of mines, forests, plantations or industrial establishments, a receiver may be appointed for the property. If the right of the plaintiff clearly appears from a public instrument, or from an acknowledgment made by the defendant before a judge, the court may make such order as may be required for the effectiveness of the judgment. (C. C. arts. 1785-1789; L. C. P. arts. 1407, 1417-1426).

SHIPPING:

The principal features of maritime law and shipping regulations are covered by Articles 573 to 869 of the Code of Commerce which lay down rules as to the ownership and transfer of vessels, priority of liens thereon, liability of owners and captain, rights and obligations of officers and crew, maritime contracts, bills of lading, marine insurance, average, collisions and shipwrecks. Further regulations are found in the customs ordinances (G. O. 173 of 1901, Law of October 9, 1923), the Law of Ports (R. D. of Oct. 31, 1890) and decrees 3283 of Dec. 26, 1933, and 142 of Jan. 23, 1941. Owners, captains and pilots must be Cuban citizens and on sailing vessels of over 100 tons and mechanically propelled vessels of over 200 tons the captain and chief engineer must be native Cubans. Coastwise trade is restricted to Cuban vessels. Merchant vessels may be mortgaged. (L-D 1420 of May 12, 1954).

STATUTE OF FRAUDS:

See Public Instruments.

STATUTES:

The laws of Cuba consist principally of laws of Spain enacted for or extended to the colony

of Cuba. The greater part of this law still exists without change, so that treatises on the laws of Spain can be used and are applicable to the laws of Cuba, and the jurisprudence of Spain is useful for the interpretation of the Cuban laws. The Spanish law in Cuba has been modified, first, by the United States governments of intervention, and second, by the laws passed by the Cuban Republic; but its fundamental principles remain unchanged.

The laws of Cuba are largely codified, the principal codifications and the years of their enactment or extension to Cuba being as follows: Civil Code, 1889; Law of Civil Procedure, 1885; Code of Commerce, 1886; Penal Code, 1936; Law of Criminal Procedure, 1889; Mortgage Law and Regulations, 1893; Law of Contentious-Administrative Procedure, 1888; Organic Judiciary Law, 1909; Notarial Code, 1929; Organic Law of Executive Power, 1909; Provincial Law, 1908; Municipal Law, Municipal Accounting Law, Municipal Tax Law, 1908; Law of Public Works and Regulations, 1883; Law of Special Imposts for Public Works, 1925; Law of Waters, 1891; Mining Law, 1883; Railroad Law, 1902; Military Penal Law and Procedure, 1936; Law of Ports, 1890; Customs Ordinances, 1901; Postal Code, 1899; Civil Service Law, 1909; Electoral Law, Sept. 3, 1957.

TAXATION:

Tax on Conveyances and other Contracts.—Many classes of contracts are subject to the tax on transmissions and rights in rem. On transfers of title the tax is 3.6% of the consideration; if the consideration expressed in the deed appears less than a fair consideration, a Treasury appraisal determines the value. The mortgage tax is .54%. Gift taxes apply at the same rates and in the same manner as inheritance taxes. (L-D 1943 of Jan. 21, 1955).

Taxes on real estate are imposed by the municipalities. They are based not on an appraised value of the property but on its income and rental.

Income and profit taxes are of various kinds: (1) on dividends, bond interest and certain other similar income 6%, and on the interest on securities issued by foreign countries or foreign public or private corporations not doing business in Cuba, 7%. (2) On income of merchants and industrialists, individuals or companies, except as provided under the next number, tax ranging from 10.70% on amounts up to $25,000 to 35% on amounts over $1,000,000. (3) On income of corporations, share companies, banks and persons or firms engaged in the manufacture of sugar, tax ranging from 18% on amounts up to $100,000 to 36% on amounts over $1,000,000. There are special rules regarding railroads, shipping companies and certain other enterprises. Foreign companies which sell in Cuba at prices not deemed bona fide or whose income consists of rentals or percentages are liable to a tax of 3.6% on gross receipts. (4) On income of individuals, tax ranging from 1% to 30.5% depending on the source and amount of income. (5) On profits of corporations and companies in excess of 10% of the capital employed by them in Cuba, 25%. (6) On bearer shares, 1.5% of the real value of each share with a minimum of 50 centavos per share. (Law Jan. 29, 1931; Law 28 of Sept. 8, 1941; Law 1 of Dec. 31, 1941; Law 7 of April 5, 1943; Law 16 of Nov. 22, 1949; Decree 1599 of June 5, 1950; Law 2 of May 22, 1951; Decree 2500 of June 20, 1951; Law 13 of Dec. 22, 1951; Decree 508 of Feb. 21, 1952; L-D 545 of Nov. 20, 1952; Decree 888, Apr. 7, 1955).

Capital gains from sale or alienation of capital assets effected after one year from date of acquisition are taxable according to two schedules of rates, as follows: for taxpayers subject to Profits, Excess Profits and Global taxes, the tax ranges from 8% on gains under $25,000 to 18% on gains in excess of $1,000,000; for taxpayers subject to income tax, the tax starts at 0.5% on gains under $2,400 increasing gradually to 15% on gains in excess of $55,000. Allowances are made for depreciation, improvements and acquisition expenses. The above rates do not apply to gains obtained within one year from date of acquisition which continue to be taxed at the regular income tax rates. The tax applies to entities, individuals and persons married under a community property system. (Law 6 of Oct. 27, 1955; Temporary Regulations of Dec. 12, 1955).

Obligatory Distribution of Dividends.—Corporations, whether domestic or foreign, must distribute a dividend within six months after the close of the corporate fiscal year whenever surplus and undistributed profits for that year exceed 30% of the capital of the company, as evidenced by the value of the stock issued and outstanding. If the surplus exceeds 30%, but is less than 60% of the capital, a minimum of 50% of the annual net earnings must be distributed; if the surplus exceeds 60%, but is less than 100% of the capital, a minimum of 75% of the annual net earnings must be distributed; if the surplus exceeds the capital, a minimum of 100% of the annual net earnings must be distributed. These dividends need not be paid entirely in cash, but no more than 50% of the dividend can be in the form of a stock dividend. (Law 2 of May 22, 1951; Decree 2500 of June 20, 1951).

Capital Tax.—All corporations and companies, whether national or foreign, must pay 5 per mil per annum on the capital with which they operate in Cuba. Such amount declared as capital may be changed freely each year. (Laws 7 of Apr. 5, 1943, 2 of May 22, 1951, 13 of Dec. 22, 1951; L-D 545 of Nov. 20, 1952).

Global Tax on Income.—All merchants and industrialists, partnerships and corporations, whose annual income from gross sales and otherwise is $3,000 or over but does not exceed $70,000, must pay this tax in lieu of following taxes: income, capital, excess profits and tax on bearer shares. Only allowable deductions from gross income are value of returned merchandise and justifiable discounts to customers. The tax is reported and paid on a quarterly current basis. Individuals or entities may use this method of payment even if their income reaches $84,000 a year; if it exceeds this figure, the four separate taxes must be reported and paid, and credit is given for quarterly payments already made under global tax. Quarterly rates range from $10.29 on $750 of quarterly individual or partnership income up to $204.33 on $17,500 of such income, while corporations pay from $15.09 (if registered shares only) or $25.55 (if bearer shares) on $750 and up to $299.55 (registered shares) or $507.35 (bearer shares) on $17,500. Certain deductions are granted to entities dealing in foodstuffs, pharmaceuticals and gasoline and other fuel products. (Law 13 of Dec. 22, 1951; Decree 508 of Feb. 21, 1952).

Inheritance taxes are graduated according to the amount inherited and the degree of relationship; thus children pay from 2.8% on amounts up to $10,000 to 14% on amounts over $5,000,000; collaterals of the second degree pay from 7.7% to 32.3%; unrelated persons pay from 45% to 72% on the same amounts. In some cases an additional 10% of the respective quota is payable for certain pension funds. (L-D 1943 of Jan. 21, 1955).

Stamp Taxes.—Most contracts, court orders, pleadings, mercantile documents and similar papers require revenue stamps depending on the amount involved. (Decree-law 250 of Sept. 21, 1935; Laws 25 of May 15, 1941, 31 of Nov. 22, 1941, 2 of May 22, 1951, 13 of Dec. 22, 1951).

Special Taxes.—A tax which was originally a sales tax is collected on the purchase and importation of foreign merchandise and on the sale of most classes of Cuban merchandise by the producer; it ranges from 2.75% on certain articles connected with sugar planting to 9% on foreign products. (Decrees 3212 of Sept. 22, 1947 and 5122 of Dec. 2, 1949). Other special taxes comprise a tax of 2% on money taken out of the country (Law of July 15, 1925; Law 7 of Apr. 5, 1943); a tax of .08% on capital invested abroad by Cuban individuals or companies (Law 7 of Apr. 5, 1943; Decree 765 of Mar. 3, 1950); taxes on gasoline, vehicles, etc. There are also fees payable to various public officials, registrars, notaries, etc., which are frequently higher than corresponding fees in the United States.

Special Tax Benefits.—Law-Decree 1038 of Aug. 15, 1953 grants substantial tax exemptions to new industries. Decree 2161 of Aug. 8, 1957 provides for tax benefits for industries located in "industrial cities" as defined therein.

TRADEMARKS AND TRADENAMES:

(Decree-law 805 of Apr. 4, 1936).

Trademarks may comprise any sign or device to distinguish products of industry, commerce,

agriculture and labor. The following cannot be registered as trademarks: (1) Symbols which may be confused with others already registered; (2) national or foreign coats of arms, flags or insignia, unless as an accessory element on authorization granted; (3) surnames, except of deceased historical persons and in the absence of opposition by authorized living persons, tradenames or initials not belonging to petitioner or insufficiently explained, but name of manufacturer may be used if authorized; (4) portraits of living persons without authorization, or of deceased persons if relations within fourth degree make objection; (5) generic designations; (6) reproductions of state securities or of national or foreign coins; (7) red cross emblems; (8) geographical names appearing in text-books, but such names may be registered as collective tradenames of the producers of a region; (9) designs of checks, policies or mercantile documents of banking, mercantile, industrial or professional institutions; (10) designs contrary to morals or disparaging the state, a foreign state, persons, religions or institutions, or ideas or objects worthy of esteem; (11) emblems conveying false notions as to origin or credit; (12) colors, unless combined in a peculiar form; (13) designations already registered, suppressing or adding any word.

Registration of trademarks is granted for 15 years and may be renewed indefinitely for like periods. The fee is $12.50. The petition is made to the Department of Commerce, filing a typographic cut, 20 cuts of the typographic reproduction and a certificate of registration of the trademark in the country of origin if applied for by a person residing abroad. A trademark expires if the owner does not make use of it within Cuban territory during three consecutive years except in cases of force majeure.

Tradenames may be registered only by persons or firms domiciled in Cuba, without prejudice, however, to the provisions of international conventions.

TRUST DEEDS: See Mortgages.

TRUSTS:

Trusts as developed by the common law are unknown in the law of Cuba, but it is possible to constitute a relationship substantially the same as a trust.

USURY: See Interest.

WILLS:

(C. C., arts. 662-911; L. C. P., arts. 1942-1967).

Wills may be made by all persons except minors less than 14 years old and persons mentally incapacitated. The making of a will is a personal act and cannot be delegated. The naming of heirs and legatees cannot be left to a third person, nor can the designation of the amounts to be given to heirs and legatees who are personally indicated be delegated. The testator may, however, give to a third person authority to determine distribution of amounts which he leaves to a definite class, and also the selection of the persons or establishments to whom the amounts shall be given.

Testamentary Dispositions.—The testator can dispose freely of his property only in so far as there are no obligatory heirs (see Descent and Distribution). He may disinherit only for certain cases of unworthiness mentioned in the law. Legacies may be charged with conditions, but no provision of transfer to another person can extend beyond the second degree of lives in being at the testator's death. Testamentary provisions are void if made in favor of the priest attending the testator during his last illness, or of the priest's relatives to the fourth degree, or his church, or if made by a ward in favor of the guardian before the accounts of the guardianship are approved, except in cases of close relationship, or if made in favor of the notary before whom the will is signed, or of the wife or relatives to the fourth degree of the notary.

Form of Wills.—With respect to form wills are either (a) common, or (b) special. The common wills are: (1) Holographic; (2) open wills; and (3) closed wills. The special wills are: (1) Military wills; (2) maritime wills; and (3) foreign wills. The following cannot be witnesses: minors, except in case of epidemics; persons not domiciled in the locality; blind and entirely deaf or dumb persons; persons who do not understand the testator's language; mentally incapacitated persons; persons convicted of forgery or perjury or who have lost their civil rights; employees or relatives to the fourth degree of consanguinity or second of affinity, of the officiating notary. In general, in order to make a will in the Cuban form in a foreign language two interpreters must be present and translate the testator's instructions into Spanish. The notary and at least two of the witnesses must personally know the testator or he must be identified by witnesses personally known to the notary and to the witnesses.

Holographic Wills.—Holographic wills are those entirely written and signed by the testator. The testator must be of age, and the year, month and day of the will must be expressed. Foreigners may make holographic wills in their own language. Holographic wills are void unless protocolized before the judge of first instance of the testator's domicile or place of decease within five years after his death. Persons having such a will in their possession must produce it to the court within ten days after receiving knowledge of the death of the testator under penalty of being liable for damage caused by the delay. The judge summons the surviving spouse and the ascendants and descendants or brothers and sisters, opens the will, hears the testimony of witnesses and decides on the admission of the will.

Open wills are executed before a notary empowered to act at the place of execution and three witnesses who see and understand the testator. The testator declares his wishes, the notary reads the will to the parties assembled and all sign, the date and hour being expressed. If the testator is in imminent peril of death he may make a will before five witnesses without the presence of a notary. In the case of epidemics he may make his will orally before three witnesses more than sixteen years of age. In such cases the will becomes void upon the expiration of two months after the peril or epidemic ceases, or of three months after the decease, if the matter is not brought before the proper court to have the will reduced to writing.

Closed wills may be written by the testator or another person, setting forth the place and date. If written by the testator he puts his scroll on every page and signs at the end; if written by another person the testator signs every page and at the end. If the testator cannot sign, another may sign, setting forth the reason. The will is placed in a closed and sealed envelope; the testator appears with it before a notary and five witnesses, and declares that the envelope contains his will, describing the manner in which it is written; on the envelope the notary makes a statement which is signed by all present, setting forth the hour, place and date, and certifying that in his opinion the testator was qualified to make such will. Blind and illiterate persons cannot make closed wills. Deaf and dumb persons must write such wills themselves. In case of lack of formalities the will is void as a closed will but may nevertheless be valid as a holographic will. Any person having a closed will in possession must produce it to the court within ten days after receiving knowledge of the testator's death or be liable for damage caused by the delay.

Military wills may be made during a war before officers, from captains up, and during a battle, before two witnesses.

Maritime wills may be open or closed and may be made before the captain of a vessel and two witnesses during voyages.

Revocation of Wills.—Closed wills may be revoked by mutilation or destruction, others are revoked with the same solemnities as required for their execution or by making a subsequent will. The recognition of a natural or illegitimate child in a will is effective although the will is revoked.

Foreign wills are valid if executed with the formalities required by the country of execution. Cubans may also make wills before Cuban Consuls who in such cases act as notaries.

EXHIBIT J

SUMMARY OF MINING AND PETROLEUM LAWS OF THE WORLD

By Northcutt Ely

* * * * * * * * * * * information circular 8017

UNITED STATES DEPARTMENT OF THE INTERIOR
Stewart L. Udall, Secretary

BUREAU OF MINES
Marling J. Ankeny, Director

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PETROLEUM

The Mining Code of 1953 provides that petroleum is subject to special concession contracts. There is no general petroleum law; contracts are subject to approval by the assembly. The terms of the concession are subject to negotiation. A new oil law, as well as mining law, is now under consideration.

A concession contract of an American company, dated April 25, 1951, approved by the assembly, provides for an exploration period of 6 years, to be followed by a 40-year exploitation period, if commercial oil is found. It covers approximately 3 million acres of land. A cash bonus of $18,000 is exacted, and the concessionaire is obligated to spend at least US$200,000 during the first 2 years of the concession and exploration and an equal amount during the following 2 years. No drilling obligation is stated, but the concessionaire is required to produce within the first 10 years at least 500 barrels daily for each exploitation lot (10,000 hectares). Royalties range from 10 to 16⅔ percent, depending on quantity of production. An equal division of profits is anticipated between the Government and the concessionaire when commercial production is achieved; the royalty is credited against the Government's share. There is no provision for extension at the expiration of the 40-year exploitation period. The concession holder is exempt from export duties and from import duties if production is below 5,000 barrels a day.

CUBA (1, 2, 7, 16) [25]

CONTROLLING LAWS

The mining law of Cuba distinguishes ownership of the soil that belongs to the private surface owner from ownership of the minerals that are the property of the state. Rights to minerals are acquired from the state, pursuant to the provisions of the governing laws. The principal laws on noncombustible minerals are the Mining Law of July 6, 1859, as amended by the law of March 4, 1868; the Mining Decree of December 29, 1868, as amended; Presidential Decree No. 1076 of September 28, 1914; and Presidential Decree No. 1996 of July 15, 1955. On mineral fuels the principal laws are the Law of Combustible Minerals of May 9, 1938; Presidential Decree 2625 of October 16, 1939; Decree-Law 1526 of July 8, 1954; and Resolution-Law No. 40 of July 8, 1958.

MINING

Noncombustible minerals are divided into four classifications.

The first class includes stone and building materials that may be freely exploited by the surface owner without the necessity of a concession from the state.

The second class includes ochre, phosphates, kaolin, fluorspar and related earthy substances. Should the surface owner decline to exploit, the state may grant an exploitation concession to a third person.

The third class includes all other minerals, except radioactive minerals, which comprise the fourth class.

Third- and fourth-class minerals may be exploited only by a concession from the state. Concessions are obtained by denouncement proceedings whereby the mineral discoverer applies to the authorities for a grant of the right to work a mine. For noncombustible minerals no concession will be granted for less than 4 hectares. For combustible minerals the minimum area is 16 hectares.[26] The application, made to the Governor of the Province where the minerals are found, is published in the official newspaper. The property is then investigated by the Dirección de Montes, Minas, y Fauna (Administration of Forest, Mines, and Fauna), a department of the Ministry of Agriculture; and an official survey is made by the Government. If approved, the President of the Republic issues a decree confirming the concession, which is then forwarded to the Governor of the Province, who issues a title in favor of the applicant. Before title is issued, a nominal fee varying from 50 ctvo. (centavos) to $1 (peso) per hectare depending on the type of mineral is paid. Concessions are valid in perpetuity provided taxes are paid and other legal requirements met, regardless of development work. This fact has been commented upon by the U.S. Department of Commerce, Office of International Trade, as follows:

> The Cuban mining law permits anyone to make a denouncement of a tract of land and become the holder of the mineral rights indefinitely without performing any type of development work. While there are no known instances of failure to exploit economic mineral deposits, because of these provisions their effect has been to tie up many acres of mineral lands.

It is reported that no signed concessions have been issued during the past 10 years, but

[25] Written before promulgation of the intervention and expropriation decrees of the Castro regime.

[26] The mining claim (pertenencia) for noncombustible minerals is a solid, of indefinite depth, with a square base, 100 meters on each side. For combustible minerals the pertenencia is a surface unit of 40,000 square meters.

that the Government, as a matter of custom, has recognized unsigned concessions. Their validity has not been tested in the courts.

Mining concessions are legally open to U.S. citizens and American companies in Cuba. The U.S. Government owns a nickel plant at Nicaro, operated by private industry under a management contract.

PETROLEUM AND OTHER HYDROCARBONS [27]

Deposits of oil, gas, and coal and other hydrocarbons are the property of the state and may be developed only by a concession, which is granted at the discretion of the Executive and which may be obtained by foreign individuals or companies domiciled in Cuba.

Concessions are of two types: Exploration and exploitation. An exploration concession may not exceed 8,000 pertenencias of 4 hectares each, and an annual tax of 5 ctvo. per hectare is charged. No concession may be smaller than 4 contiguous pertenencias forming right-angled polygons whose sides are multiples of 200 meters. Concessions that were valid on July 31, 1958, expire on July 27, 1962. Concessions granted after July 31, 1958, expire 3 years after their issue date.[28] The holder of an exploration concession has an exclusive right to request one or more exploitation concessions within the area.

Exploitation concessions may not exceed 2,000 pertenencias. They are valid for 30 years and may be extended for an additional period of 10 years in the event of commercial production. Each concession must be divided into eight lots, of which the Government may select one. No legally constituted entity may own concessions exceeding 75,000 pertenencias. After an initial tax of $1 per hectare, exploitation concession holders must pay an increasing annual surface tax of 10, 20, and 40 ctvo. per hectare during the successive 10-year periods under the concession, plus a 10-percent production royalty (reduced to 9 percent for petroleum refined in Cuba), and a 1-percent royalty to the surface owner. The Government's royalty is 20 percent during the 10-year extension period.

The profits tax ranges from 10.7 percent on earnings up to $25,000 per year to 35 percent on the excess above $1 million. However, oil explorers equipped to drill 4,000 feet are exempted from 10 percent of the profits tax for 10 years, from capital taxes, and from fiscal charges on the first $3 million of shares issued.

When the concession expires, improvements revert to the Government and the concession is put up for sale at public auction, with a preemptive option for 60 days to the former holder.

Asphalt exploitation must begin within 2 years after the concession is granted or a penalty will be levied. One oil well must be drilled every 5 years or the concession may be forfeited. Small concessions may combine in meeting this drilling requirement. The state reserves the right to regulate production in the public interest.

Concessions in the National Reserves.—National reserves are made up of the areas set aside by the Government in free lands, and of the lots selected by the Government (*see* the foregoing material on exploitation concessions), in the event of discovery within a concession on free lands. Concessions in the reserves are granted exclusively to Cuban companies, but foreigners may own shares in such companies. They are granted on a competitive basis. Taxes and royalties may not be less than those fixed in the law for regular concessions. The general provisions of the petroleum law are applicable to concessions in the national reserves.

Pipeline Concessions.—Concessions for pipelines are recommended by the Secretary of Agriculture and may be granted by the President of the Republic for a term of 30 years. They are of three types: (1) Common carrier pipelines (not related to an exploitation concession) that terminate in 30 years and revert to the Government (which may sell them at auction, the former concessionaire having 60 days to equal the highest bid); (2) common carrier pipeline concessions issued to holders of exploitation concessions; and (3) pipelines for private uses, issued exclusively to holders of exploitation concessions (which are not common carriers but are obliged to carry up to 20 percent of capacity for the Government). Special taxes are paid on the first and third classes of pipeline but not on the second class.

Special Inducements to Foreign Capital.—For many years small quantities of oil have been produced in Cuba from shallow wells, but until oil was struck on the Dos Estrellas concession in the area of Camaguey in mid-1954 there was little sustained effort to find deeper oil structures. In 1954 the Government of Cuba through Decree-Laws 1526 and 1868 offered special financial inducements to foreign companies to engage in drilling operations. These laws expire July 8, 1959, unless extended.

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[27] See Special Inducements to Foreign Capital for provisions of a 1954 decree that modifies the following text with respect to oil and gas operations for the period expiring July 8, 1959. Resolution-Law No. 40 of July 8, 1958, extends the modifications until July 27, 1962, beyond the original expiration.

[28] World Petroleum Legislation reported in 1959 that the Government was considering extending the period of exploration concessions to 5 years. However, the Castro regime stopped granting concessions to foreigners and the status of concessions held by Cubans is uncertain.

These decrees authorize loans for exploration, matching $2 for each $3 invested by exploring companies in drilling (but not geological expenditures) for a maximum of $1 million invested by the exploring company ($666,667 by the Government). When oil is discovered, a 10-percent bonus in addition to the regular 10-percent royalty plus an additional sliding scale royalty is payable to the Government, after repayment of principal and interest. When no oil is found, the loan need not be repaid. In addition, under the 1954 decrees, the Government will extend the 30-year development term of a concession for 10 years at a 20-percent royalty, for the benefit of discoveries made within the 5-year period covered by that decree. A 10-year exemption from the 10-percent profits tax law of July 29, 1932, and from the tax on capital is offered to companies expending $1 million or more on exploration and immediate drilling, and the surface tax is reduced from 15¢ per hectare to 5¢ per hectare.

As a result, Cuba (prior to the Castro regime) attracted many companies of all sizes and granted exploration concessions covering almost the entire area of the island, which amounts to 28 million acres, as well as several million acres of offshore territory.

DOMINICAN REPUBLIC (8)

CONTROLLING STATUTES

Mining in this Republic is governed by laws enacted by the country's National Congress. Two basic laws provide the legislative framework for all mineral activity. Law No. 4550 of 1956 covers all solid minerals, and Law No. 4532 of August 30, 1956, controls the exploration and development of petroleum and natural gas resources. Both laws are founded on the constitutional premise that all natural mineral substances are the property of the State and may be exploited only under contracts or concessions authorized by law. Rights under either law may be granted to foreigners on the same terms as to Dominicans, but only when the foreigners expressly submit themselves to the jurisdiction of the laws of the Dominican Republic. Foreign governments may not under any circumstances obtain mining concessions.

MINING

Mining Law No. 4550 of 1956, covering all natural mineral substances except hydrocarbons, provides detailed requirements for the acquisition of mineral rights in the Republic. The law sets up two basic categories: (1) Mines that include metal- and nonmetal-bearing minerals as well as mineral carbons; and (2) quarries that produce from stone, peat bogs, and sand deposits.

Superficial surveys may be made of any area by any individual or entity within the country not already covered by an exploration permit or concession. Permission to enter private property must be obtained from the owner, and indemnity must be paid for any damages. When any indication of mineral is found, a claim accompanied by mineral samples for analysis by the Government, may be filed in the master registry at the Dirección de Minería (Mining Administration) and once registered gives the holder a 90-day prior right to an exploration permit or mining concession.

Exploration permits not to exceed 2 years for a selected area may be obtained if the area is not already covered by a permit or concession or is not reserved in the public interest, such as a military zone. A permit may be transferred only when approved by the Bureau of Mines. Minerals may not be exploited under a permit. The holder may relinquish the permit at any time upon notification, or the Administration may declare it lapsed if exploration work is not begun or accomplished on time, or other regulations are violated.

Concessions, which may not cover an area that is under mineral grant or that is reserved in the public interest, are of the following three classes:

1. A concession for prospecting consists of 16 mining hectares[29] (in a square that is 400 by 400 meters and oriented directionally) less any area that is held under prior concession title (the starting point must be distinctly marked). It has a nonrenewable term of 2 years and is not subject to the special surface tax. The holder of the concession is entitled to use all minerals obtained by his efforts and has the exclusive right to apply for an exploitation concession during the 2-year term. No individual or entity may hold more than one prospecting concession at any one time.
2. Exploitation concessions may be obtained for the surface area requested for an unlimited time. Under this concession, the holder may also install and operate plants for treating minerals and establish any other necessary facilities. New minerals discovered distinct from those originally specified by the concession may be exploited when the Dirección de Minería is notified.
3. Concessions for operating treatment plants permit operating a single plant for an unlimited period. The concession sets forth the minimum capacity, the budget, the location, and the terms for beginning and completing the construction work. Treatment plants are required to accept for treatment ores of third parties up to 20 percent of their capacity.

All concession holders have the right to enter upon the lands within their concession but must indemnify the owner of the land for any damages. Land for installations, plants, and ore dumps may be obtained by requesting expro-

[29] The term "mining hectare" is defined as a solid of indefinite depth bounded by four vertical planes forming a square of 100 meters on each side.

EXHIBIT K

MINING and PETROLEUM LEGISLATION in LATIN AMERICA

Volume II

PANAMA, CENTRAL AMERICA, MEXICO, CUBA, HAITI, DOMINICAN REPUBLIC

an American Union • Washington, D.C.

GENERAL SECRETARIAT, ORGANIZATION OF AMERICAN STATES

MINING and PETROLEUM LEGISLATION in LATIN AMERICA

Volume II

PANAMA, CENTRAL AMERICA

MEXICO, CUBA, HAITI

DOMINICAN REPUBLIC

Pan American Union

General Secretariat

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Washington, D. C.

General Legal Division
Department of Legal Affairs
Pan American Union, Washington, D. C.

CUBA

MINING LEGISLATION

1. Principal Legislation in Force

Law of Mines of July 6, 1859, ratified by Military Order 53 of February 8, 1900.

Basic Decree-law (Decreto-Ley de Bases) of December 29, 1868.

Military Order 78 of March 15, 1902 and Decree 593 of May 16, 1913, regulating compulsory expropriation of mines.

Decree 1076 of September 28, 1914, promulgating the Organic Regulations for Cuban mining, amended by Decree 55 of January 18, 1915; Decree 716 of May 31, 1915; Decree 447 of April 5, 1916; Decree 869 of May 21, 1918; Decree 147 of February 5, 1921; Decree 1370 of August 15, 1928; Decree 470 of April 12, 1932.

Law of July 1, 1920 on payment of the surface canon.

Decree 768 of June 7, 1930, concerning petroleum concessions.

Decree 717 of May 26, 1931, on denouncements of petroleum deposits.

Decree 676 of May 19, 1932, relating to the Special Mining Fund.

Decree-law 824 of April 4, 1936, the Organic Law of the Ministry of Agriculture.

Law on Combustible Minerals of May 9, 1938.

Decree 2501 of September 28, 1939, on payment of the canon on concessions.

Decree 2625 of October 16, 1939, the regulations of the preceding law.

Law 7 of April 5, 1943, regulating research in and development of combustible minerals.

Decree 2423 of August 23, 1943, governing strategic minerals.

Law-decree 1758 of November 2, 1954, regulating the construction and expansion of petroleum refineries.

Law-decree 1939 of January 22, 1955, creating the National Association of Distributors of Combustibles.

Decree 1996 of July 15, 1955, concerning radioactive minerals.

Decree 2462 of September 5, 1956, regulating the exploitation and exportation of gold.

Law 617 of October 27, 1959, governing mining concessions.

Law 635 of November 20, 1959, providing new petroleum legislation.

2. General Principles

Ownership of mines. The surface of the ground is subject to individual ownership but the subsoil is originally under the domain of the State, which may turn it over to common use, grant it free of charge to the surface owner, or alienate it to private persons through payment of a canon.

But in granting titles of ownership, in supervising the terms of exploitation, and in cancelling concessions that were granted, the State continuously intervenes either through the public administration or through the courts of justice, as the case may be.

The form in which a mining undertaking is operated and the legal acts governing the enterprise must be adjusted to certain rules enacted for the purpose of protecting both the general and private interests, with penalties for non-compliance in many instances.

By definition the surface (suelo) consists of the actual surface itself together with the depth to which the work of the owner has reached for cultivation, a building foundation, or purpose other than mining. The subsoil is regarded as extending indefinitely in depth from where the surface ends.

A mining unit or claim (pertenencia) in a concession is a solid with a square base of 100 meters on each side, measured horizontally but to an indefinite depth (Art. 11, Basic Decree-law)

Private persons may obtain any number of claims more than four for a single concession. These must be grouped together so as to form a continuous whole, contiguous along the full length of one of its sides.

Classification of minerals. Minerals are classified by law into four categories, each of which is subject to special provisions:

First section. This comprises mineral substances of earthy nature, silicious rocks, shales, sandstones, granite, basalt, calcareous earths and rocks, gypsum, sands, marls, and in general all construction materials found in quarries; also deposits of excrements and other organic remains found in natural caverns, caves and crevices (Basic Decree-law and Organic Regulations, Art. 1 of each).

Second section. Comprising placers, ore-bearing alluvial sands, ferrous minerals of swamps, emery, ochres, red ochre (ruddle), waste heaps and ore-bearing lands remaining from former ore processing, peat beds, pyritic earths, aluminous earths, magnesian earths, fullers' earth, nitrates, calcareous phosphates, barytes, fluorspar, steatite, kaolin, clays, asbestos, pumice stone, and guano (Basic Decree-law, Art. 3; Organic Regulations, Art. 5).

Third section. Comprising deposits of metallic substances, anthracite, coal, lignite, saline substances in solid state, copperas, precious stones (Basic Decree-law, Art. 4).

Fourth section. Comprising uranium, thorium in its different forms: pitchblende, torbonite, autinite, thorianite, etc., and other varieties of both metals (first and second paragraphs of Decree 1996 of July 15, 1955).

Mining exploration. Any Cuban or foreigner may undertake exploratory research for the discovery of minerals, making excavations or trial pits not to exceed ten meters in length or depth and holding to distances indicated by law (Arts. 13, 14, 15, Organic Regulations). The form may vary according to the nature of the land and property.

Research is free of restriction, no license being required, although notice must be given to the local authorities. The use of cultivated lands under private ownership used for orchards, gardens, irrigation, sugar cane, coffee, cotton or other major crop in the country's resources requires prior permission from the owner, without recourse or appeal. Permission of the owner is likewise required in unused lands but in this case a refusal may be voided by authority of the Government if it is shown that the lands are not used for two months. The exploring party must furnish a bond sufficient to cover damage occasioned by excavation, as agreed upon between the owner and explorer or by appraisers. The explorer is likewise liable for any further damages caused to the property.

Permission to search for minerals does not give any priority for obtaining a mining concession (Art. 31, Regulations).

System of ownership. The form of ownership depends on the nature of the mineral involved as well as whether the lands in which it is found is under public or private ownership.

Substances comprising the first and second categories, when found in public lands, are free for common use and may be exploited by any persons; intervention of administrative authorities is limited to safety measures.

When the aforementioned substances are found in private property, the State grants them to the surface owner who may regard them as his exclusive mining claim and he is not subject to any administrative intervention.

However, substances included in the second category located in privately-owned lands may be granted by the State, if the owner himself does not exploit them, to enterprises declared to be of public utility, upon payment of compensation for damages to the owner of the surface expropriated.

Substances comprising the third and fourth categories may be exploited only by virtue of a concession granted by the President of the Republic, which is to be established as property separate from the surface, although if the exploitation is declared to be of public utility the surface land may be expropriated upon payment of due compensation.

3. Concessions

Mining concessions constitute a special form of property ownership, hence the legal system governing them is subject to certain rules. As in the case of any other property, a mine owner may freely dispose of any rights granted him by a concession, hence it may be encumbered or alienated (Art. 57, Law of 1859).

Indivisibility. A mining claim (pertenencia) is indivisible in its purchase, sale, exchange, or other similar transaction between mine owners. However, concessions which cover sufficient surface area may be divided, provided that each section into which they are divided comprises at least four hectares, in the form indicated, and the division is authorized by the President of the Republic (Art. 131, Regulations).

The sale or exchange of one or more claims may be made, likewise authorized by the President of the Republic, if as a result of the transaction the concession will still meet the requirements as to area. The separation must be accomplished according to a plan approved by the Jefatura de Minas.

Acquisition. Any individual or company may freely acquire by purchase or other legal means any number of mining claims, before or after issuance of the title of ownership, but they will have no more rights than the previous holder. The provincial authorities must be notified of the transaction, the notice to be accompanied by a copy of the public instrument evidencing the transfer, and the transfer is then recognized by a decree of the President of the Republic. If the claims had not as yet been granted, the acquiring party may apply for issuance of title in his name by the administrative authorities.

Renunciation. The owner of a mining concession may at any time renounce a part of the claims making up the concession, provided that the number retained is not less than four and payment of the canon is not in arrears. This is likewise subject to notification to the provincial authorities, resurvey, and approval by the President of the Republic (Art. 130, Regulations).

Forfeiture. A concession is forfeited if the holder fails to pay the canon for one year and after legal action has been found insolvent. It is also forfeited by renunciation in writing. In the former case, the concession is declared void by the President of the Republic and it will be sold at public auction, the State retaining the amount due plus five percent and the balance going to the former owner. If the concession is not sold at three successive auctions, the land is declared open (Basic Decree-law, Art. 23; Regulations, Arts. 175-176).

A concession holder may liberate a concession forfeited for non-payment of the canon up to the amount of acceptance of a bid or termination of a third auction. Any person may intervene in the auction of a forfeited concession by offering a bid. If this is accepted and approved, he will be awarded the concession upon payment of the amount within the period indicated in the auction and a new title will be issued (Regulations, Arts. 177-178).

Perpetuity. The exploitation of non-combustible mineral substances is granted in perpetuity, provided it is not renounced and the corresponding canon is paid in due course (Basic Decree-law, Art. 19).

Canon. Mining concessions are granted on the basis of payment of an annual canon or surface tax, payable from the date the concession is granted. In accordance with previous legislation the annual canon or tax was at the rate of 20 centavos per hectare of the surface realized. Law 617 of 1959 provides for: a) the payment of an annual canon of 20 pesos per hectare for mines which are not under adequate exploitation, in the judgment of the Department of Mines and Petroleum of the Ministry of Agriculture; or b) payment of an annual canon of 10 pesos per hectare for mines which are being adequately exploited in the judgment of that Department (Article 5).

Registration. Titles to concessions are recorded in the Property Register of the appropriate municipality in which the concession is located. The first registration must contain all information permitting adequate identification of the mining concession, its title holders, and terms. A mine must be recorded under a different number than the registration of the surface land, even if both belong to the same person. All acts relating to a mining concession must be similarly recorded or annotated, including transfer, encumbrance, forfeiture, renunciation, or cancellation (Regulations, Arts. 139-148).

In accordance with Law 617 of 1959, applicants for mining concessions, as well as the title-holding beneficiaries of concessions relating to minerals included in the second and third sections of the classification contained in the Basic Decree-law of December 29, 1868, are obligated as follows: in the case of applicants, to renew their applications, and in the case of title holders of concessions, to re-register their titles, within a period of 120 calendar days, in the Registry which is to be kept for this purpose by the Department of Mines and Petroleum in the Ministry of Agriculture. This Department was created by Law 617.

Non-compliance with this obligation will be understood as a tacit relinquishment of the rights deriving from an application and to the benefits which were enjoyed by a concession. In the first case, the area referred to in an application will be declared free and registerable, and in the second case the benefits of the concession will be lost. The concession will become a reserve of the State, and the Ministry of Agriculture will order the cancellation of the concession in the corresponding Property Register.

Article 5 of Law 617 calls for payment of a fee of 100 pesos for the re-registration of each mining concession. This is presumably in addition to fees that have been paid for applications already pending, which by this Law must now be renewed.

If an application is found to be in order, with all pertinent information, it is subject to several stages of procedure:

Publication. A definitive acceptance is to be published in the Gaceta Oficial, together with notice to the municipalities where the concession is recorded. The application may be modified by a new instrument, the date of the latter being taken into account for purposes of priority.

Opposition. Within sixty days following publication any interested party may oppose the proposed concession by submitting an instrument to that effect. The applicant must be notified of any objection in order that he may contest it within twenty days.

Recognition and demarcation. If no opposition was submitted in the period indicated or it was rejected, recognition is granted and a survey made to establish the boundaries of the land applied for, within a period of six months, the applicant to be notified in due time. All interested parties may participate in the proceedings. The applicant must furnish bond for damages to cultivated and irrigated lands. When approved the application is transmitted to the Department of Mines and Petroleum in the Ministry of Agriculture for final examination.

Granting of the concession. Based on a favorable recommendation of the Department, the Minister of Agriculture forwards the application to the President of the Republic for issuance of the appropriate decree granting the concession. The

title of ownership contains the general conditions prescribed by law and any special conditions applicable to the nature of the mineral in question. An application may be cancelled on certain technical grounds (Regulations, Arts. 167 to 169).

If by any circumstances a concession is granted covering a part of lands included in a previous concession, that portion is cancelled and the area of the new concession is corrected in due course by a new decree.

Priority. Priority in the submission of an application gives a preferential right to obtain the concession of lands applied for, and all formalities are carried out in the order of priority.

Concessions to enterprises of public utility. This governs concessions for minerals in the second category. The procedure is different by virtue of the right of priority recognized for the surface owner.

An application is submitted by the same formalities as for a regular concession. But the surface owner is granted a period of thirty days in which to present opposition and indicate whether he intends to exploit the property himself. He is given a period of not more than six months in which to begin operations.

At the end of the periods indicated, or if after beginning operations the owner abandons them for one year, the land is declared open for the granting of a concession. Prior recognition may be granted for the purpose of proving existence of the mineral in question by examination of the deposit and its natural conditions and obtaining samples of the mineral. Articles 92 to 95 of the Regulations govern the proceedings for issuance of a declaration of public utility, as the basis of these concessions. Demarcation of boundaries and the granting of the concession follow the same rules as for a regular concession.

Simultaneous exploitation. Whenever mineral substances of the second category are found in the same terrain together with minerals of the third and fourth category, the possibility of simultaneous exploitation is examined. If this is found to be impossible, the holders of a concession for minerals in the third and fourth category will have the right to extend their operations to include substances in the second category; but the holder of a concession for the second category must obtain a new concession in order to exploit substances in the third and fourth category (Regulations, Arts. 99 to 101).

Special concessions. There are also certain special concessions based on the particular circumstances involved:

"Left-overs" (demasías), comprising the free spaces included between two or more concessions, which may or may not be completely enclosed, with an area of less than four caballerías or, if larger, not suitable for division into claims (pertenencias), according to Article 106 of the Regulations. One caballería in Cuba is equal to 33.2 acres.

Such a concession is granted by the President of the Republic, in accordance with the procedure prescribed for a regular concession. Priority is given to the owners of adjacent mines, next to owners of the "left-overs", and lastly to outside private individuals or companies who apply for them. Adjacent mine owners are

given a period of sixty days in which to apply, after notice of the "left-overs" has been published in the Gaceta Oficial. If their existence is unknown to the authorities, there must first be application for their recognition (Regulations, Arts. 107 to 116).

Residues and mine dumps. Land formed by deposits of metal-bearing residues, constituting alluvion, does not belong to the owner of the mine from which it originated nor to the owner of the mine in which the alluvion is deposited but it belongs to the surface owner and the substances are considered as being in the second category.

Lands and dumps of mines in operation belong to the owner thereof. If they have been abandoned, they belong to the surface owner, if any. The same is true in case of a forfeited concession. In all cases a concession may be granted to the surface owner or to an enterprise declared to be of public utility, as described above, for second category substances.

General galleries. This applies to general galleries used for exploration, drainage, or transportation. An application must be submitted, indicating the number of claims required for the undertaking, and the procedure is the same as for a regular concession.

If the gallery runs through an authorized mining concession, a written agreement must be signed between the applicant and the owners of the concession. If there is no such agreement, forced expropriation may be instituted, with due compensation, in accordance with Decree 593 of May 16, 1913.

The holder of a concession for a general gallery may obtain a reserve of a specified number of free claims in the vicinity of his operations and which may be made use of as the operations progress, with option to abandon those not suitable. Periodic inspections are made of the situation. Operations must be confined to those requested in the application.

4. Rules for Exploitation

The exploitation of mines must follow certain specified conditions prescribed by law, which also recognizes certain rights therein. Preservation of boundary markers fixed at the time of demarcation is obligatory, as well as the point of departure in measurements. Any changes must be reported. Any operations may be begun freely if there is no opposition. Otherwise permission of the surface owner must be obtained and a bond posted for damages.

Under Article 3 of Law 617, the Minister of Agriculture is authorized to order that adequate commercial exploitation be started in mines which may be considered necessary to the national interest. Concessionaires who do not start adequate commercial exploitation within sixty days after being so ordered shall lose the right to the concession, which will be cancelled in the Property Register, useful ownership (dominio útil) reverting to the State.

Once a mining concession is cancelled, the Minister of Agriculture shall order its occupation with a view to initiating exploitation thereof, together with occupancy of all equipment, the value of which is to be appraised by appointed tehnicians (Article 4).

Adjoining mines are subject to easements for ventilation and general drainage. Owners of concessions must pay compensation to adjoining mines for damages produced by accumulation of water or any other detriments inside or outside the mine. They must also pay compensation for the value of surface land needed for warehouses, shops, waste deposits, processing plants, etc. In all cases, the compensation should be arrived at by private agreement; if not, the provisions of Decree 593 of May 16, 1913 will apply.

All health regulations issued by the local Health Office must be complied with, in accordance with section two of Decree 244 of January 25, 1949. Concession holders must at all times permit any inspections required by the Government, as established in Articles 157 to 159 of the Regulations.

Rights granted to concession holders include: a) the ownership of waters found during operations, subject to provisions of the current water law, but they may not cut off or deviate the flow of waters being utilized; b) a concession may be disposed of freely like any other property, as well as other rights granted by current mining legislation; c) in a regular mining concession for substances of the third and fourth category, all substances included therein may be freely exploited; d) concession holders are considered as residents of the town in which the mine is located and as such are entitled to local rights as to use of water, woods, pasturage, etc., common to industry.

5. Royalties

Article 6 of Law 617 provides that concessionaires are obligated to pay to the State a royalty or share (participación) of 5 percent in cash or in kind, at the option of the State, on the value of all minerals extracted in their concessions, computed in accordance with the highest average yearly quotation in the world markets.

If exported, the share of the State in the minerals or concentrates of minerals shall be 25 percent of the value thereof, computed in the same manner as indicated above.

6. Expropriation

Whenever it is necessary to occupy a specific surface area for the exploitation of a mine, if the mine owner is unable to reach an agreement with the owner of the land, this may be obtained by the procedure of forced expropriation. This is governed by Decree 593 of May 16, 1913.

Declaration of public utility. The concession must first be declared to be of public utility for which the mine owner applies to the Provincial Governor accompanying his application by the title to the concession, a certificate of registration of the property, a map of the surface area deemed necessary, a memorandum of the reasons for expropriation, an estimate of fair value, and a deposit of 10 percent of this value.

A declaration of public utility and consequent expropriation will be in order if the surface owner does not agree to its alienation at a fair price, if he does not have legal capacity to sell, if the owner is unknown or his title is void or defective,

or if the surface land is attached or under judicial administration or has been mortgaged, leased, or subject to any other encumbrance.

Notice of the application must be published in the Gaceta Oficial, stating the area affected and giving a period of thirty days for the presentation of objections by parties who will be injured, who are granted ten more days to answer. The District Engineer and the Provincial Board of Agriculture must study the case on the basis of need for expropriation and the relative advantages of the mine exploitation and surface cultivation.

In the event of favorable action, the Ministry recommends to the President of the Republic issuance of the declaration of public utility.

Appraisal and occupation. As soon as a mine has been declared to be of public utility the applicant should request an appraisal of the property to be expropriated, followed by payment of the corresponding compensation and the permanent taking possession of the area in question, in accordance with rules set forth in chapter VII of Military Order 34 of February 7, 1902 and Decree 595 of May 22, 1907, regulating forced expropriation in general.

7. Provisions Governing Specific Minerals

Radioactive minerals. The production and consumption of radioactive minerals are governed by Decree 1996 of July 15, 1955. The Cuban Government has a prior right to purchase the entire production of radioactive minerals obtained within the national territory. A concession holder must notify the Ministry of Agriculture of offers and conditions received, the State being required to make use of its priority within thirty days. After this period has elapsed, the concessionaire may sell his production but if the purchaser is a foreign person or goverment the prior approval of the Ministry of Defense must be obtained.

The Ministry of Defense likewise controls the exploitation and supervision of a concession for radioactive minerals, which must be recorded in a special register.

Strategic minerals. During the Second World War a special regimen was established governing strategic minerals, in Decree 2423 of August 23, 1943. This includes manganese, zinc, chromium, nickel, and any other so designated by the Ministry of Agriculture. The restrictions imposed operate during a state of international emergency.

Gold. The exploitation and exportation of gold are subject to rules contained in Presidential Decree 2462 of September 5, 1956. The rules include possible operations directly by the State if the production is intended to cover or increase the monetary reserves of the Nation. A permit from the National Bank of Cuba is necessary in order to export gold.

8. Mining Authorities

As indicated, Law 617 created the Department of Mines and Petroleum under the Ministry of Agriculture, and this becomes the principal authority in matters relating to mining. The courts of justice have jurisdiction over all questions relating to ownership, participation, debts, offenses, expenses of exploitation, distribution

of proceeds, and fraud. Judicial proceedings shall at no time hinder operations. Appeals against administrative decisions may be taken to the Civil Contentious-Administrative Section of the Audiencia in Havana. Appeal from decisions of this court may be taken to the Supreme Court.

Law 617 also established a Fund for the Development of Mining (Fondo de Desarrollo de Minería) in charge of the Ministry of Agriculture. The assets of this Fund are to come from the fees of 100 pesos collected for re-registrations and from the canon or surface tax mentioned elsewhere in this chapter.

PETROLEUM LEGISLATION

1. General Principles

Legislation. The basic laws governing combustible minerals are the Law of May 9, 1938 and its Regulations contained in Decree 2625 of October 16, 1939, and Law 635 of November 20, 1959. There is great similarity between the legislation governing ordinary mining and that of hydrocarbons, or combustible minerals as they are termed in Cuban legislation, particularly with respect to application procedure. The most noteworthy difference is the principle of a stronger domain or ownership by the State. A list of all legislation in force is contained in the preceding chapter on mining.

Ownership. The Nation has inalienable and imprescriptible ownership of all combustible minerals or any mixture of hydrocarbons found in such deposits, regardless of their physical state. Private persons may be granted the right to explore and exploit them (Art. 4, Law of 1938). As original owner, the State has rights of intervention and restriction.

Dimensions. For combustible minerals, a claim (pertenencia) is a surface unit of 40,000 square meters in area. A concession may not contain less than four claims, to be grouped in the form of a continuous right-angled polygon whose sides are multiples of 200 meters. If in the form of a rectangle, the ratio of the sides shall not exceed ten to one, with the same proportions preserved for any other figure.

A concession for exploration may not exceed eight thousand claims and a concession for exploitation may not exceed two thousand. No person may be the concession holder, directly or accumulatively, of an area greater than 75,000 claims. A concession is limited underground by the vertical planes of the sides of the perimeter of the area covered.

Concessionaires. Any natural or juridical person of Cuban nationality or a foreigner legally domiciled in Cuba, having legal capacity to make contracts, may acquire a concession for combustible minerals. Such a concession may in no case be granted to a foreign government, state, or public official.

Free lands. These comprise all lands not granted as a concession or for which no application is in process, as well as all lands reserved by the State (Art. 18, Decree 2625).

Classification of minerals. Combustible minerals include petroleum deposits and deposits of all other hydrocarbons found on the surface or underground, whether solid, liquid, or gaseous. They are divided into three Groups:

Group One: petroleum and its natural associates, liquid and gaseous, such as naphtha, natural kerosene, hydrocarbon gases, and helium.

Group Two: asphalt in any state, bitumen, tar, elaterite, resins, and similar minerals.

Group Three: fossil coals, with the exception of peat.

Concessions for the first group also protect the exploration and exploitation of substances included in groups two and three, but a concession for either of the two latter groups does not authorize the exploration or exploitation of substances included in the first group (Arts. 2 and 3, Law of 1938).

2. Concessions

General principles. The legal provisions governing these concessions follow the basic principle of inalienable and imprescriptible ownership by the State. A concession confers only the right to explore and exploit a deposit for a specified time under specified conditions. It is granted at the risk and venture of the applicant with no guarantee by the State of the existence of minerals or any obligation of warranty.

The rights acquired by a concession for combustible minerals may be sold, assigned, encumbered, or subjected to any transfer or alienation, provided the transaction is recorded in the Register of Mines in the Ministry of Agriculture within the year following the date thereof. Any transfer, total or in part, in favor of a foreign government or State shall be null and void (Arts. 8 and 13, Law of 1938; Arts. 17, 43, 46, 167, 200, and 204 of Decree 2625).

As in the case of non-combustible minerals, a claim (pertenencia) cannot be divided, and similar rules apply to the division of concessions, adjacent mines, and applications.

Any person having the legal capacity of a concessionaire may acquire a concession, either originally or through alienation by a private person. Any concession holder has the right to renounce his concession, but must take due steps to prevent danger to the public from abandoned wells, excavations or tunnels, and must duly notify the provincial government.

Different from concessions for non-combustible minerals, a concession for combustible minerals is limited to a fixed time, varying according to the class of concession, and the lands covered thereafter revert to the State in full (Arts. 20, 21, 39, 40, 42, Law of 1938).

State reserves. The Executive Power shall establish in each mineral basin, according to its size, one or more plots selected from free lands or from cancelled or forfeited registrations; from one eighth of the total surface area of a concession in exploitation; from lands released by the beneficiary of a concession of exploration, set aside as a reserve within six months; and from the free lands area of a concession that has been refused.

Classes of concessions. The Law on Combustible Minerals recognizes three classes of concessions:

Concessions of exploration (Art. 20)
Concessions of exploitation (Art. 21)
Concessions for pipelines (Arts. 38 to 43)

Payments. Concessions are subject to the following payments:

a) Canon. The holder of an exploration concession must pay an annual surface canon of 5 centavos per hectare. The holder of an exploitation concession must pay an annual canon of $5 per hectare during the first ten years; $15 per hectare during the second ten years; and $20 per hectare during the last ten years. See also Article 8 of Law 635.

Payments of the canon must be made yearly in advance, during the first ninety days of each year, beginning with the date the concession was granted.

b) Royalty to the State. See text of Article 9 of Law 635, below.

c) Royalty to the surface owner. Without prejudice to compensation that may be paid for expropriation, the holder of a concession for exploitation of petroleum and naphtha must pay the surface owner 1 percent in money of the gross production of wells in existence, the amount and price to be computed in the same manner as the royalty paid to the State. This payment is regarded as compensation for loss and damage and easements, separate from that for the material value of the surface that is occupied.

d) Export charges. With the exception of petroleum and naphtha, combustible minerals exported in their natural state must pay an export customs duty of 1 1/2 percent of the f.o.b. value, without deductions for expenses of any kind.

e) Royalty on indemnities. If a petroleum, naphtha or natural gas well is insured against any risks, the State shall receive 10 percent of any indemnity paid to the beneficiary in the event of a disaster.

f) Other charges. In addition, concession holders must pay the advance deposit and the fees for issuance of title to the concession.

The foregoing charges and payments are governed by Article 23 of the Law of 1938 and by Articles 138 to 150 of the regulations contained in Decree 2625.

Exploration concessions. An exploration concession gives the holder the right to carry out work for the purpose of discovering combustible minerals. It is granted for a period of three years. Within this period only the concession holder has the right to apply for an exploitation concession for the area covered. He may apply for one or more concessions in a plot or plots desired within that area.

For exploration purposes, the concession holder must obtain the consent of the surface owner for occupation of the lands needed. If no agreement is reached both parties may agree to submit their differences to the Ministry of Agriculture acting as arbitrator, but if this does not achieve results, the concession holder may occupy the lands through forced expropriation.

The procedure for applications basically follows the rules established for regular concessions for non-combustible minerals of the third and fourth category but

with a special feature that the application is accepted provisionally by the Ministry of Agriculture and only recognition, without demarcation, is required.

Exploitation concessions. Such a concession confers on the holder the right to exploit deposits and acquire ownership of the products collected or extracted. An exploitation concession is granted for a period of thirty years and all rights of the holder in the parcels of land granted cease at the end of such period.

Thereafter the Nation becomes the owner of all permanent works such as buildings, wells, warehouses, storage tanks, etc., constructed on the concession, without payment of indemnity of any kind.

The State has the right to exploit an expired concession directly or may grant it as a new concession. In the latter case it will be offered at public auction, according to specifications drawn up by the Department of Mines and Petroleum. The former concession holder has the right of preemption (tanteo) which he may use within sixty days following the holding of the auction.

Upon recommendation of the Ministry of Agriculture, a concession holder is entitled to establish inside or outside the concession such installations as may be required for the extraction, conduction, storage and exportation of combustible minerals, with the right to expropriate surface land needed if an agreement is not made with the surface owner.

Free lands may be granted for exploitation without the necessity of having previously been granted as exploration concessions. In such cases priority of a legally drawn up application gives preference over any subsequent applications.

In general terms applications for an exploitation concession follow the same procedure as for regular concessions for non-combustible substances of the third and fourth categories. However, a provisional approval is given by the Ministry of Agriculture, followed by issuance of the permanent title. There is also a difference in the amount of advance deposit required.

Concessions for pipelines. The law has established three classes of pipelines:

Public service pipelines, first class. Such a concession is granted to any person meeting the requirements of a concessionaire, with the obligation to transport petroleum for any person applying therefor and in addition the quantity pertaining to the national Government, up to 20 percent of the capacity of the pipeline. The State will pay the regular approved rates for this service.

The concession is granted for a period of thirty years, after which all permanent works revert to the State, and if the Government decides not to operate the pipeline directly a new concession will be granted by public auction. The former concession holder has the right of pre-emption within sixty days.

The holder of such a concession has the usual rights to occupy and expropriate surfaces areas needed for installations, with payment of due compensation for damages, breaks, leakage, etc.

Public service pipelines, second class. This is granted for thirty years exclusively to beneficiaries of an exploitation concession, all works reverting to the State thereafter as in the foregoing category. The holder of such a concession has the

obligation of transporting up to 20 percent of capacity of the pipeline for other private operators not having such facilities. The quantities are to be divided pro rata among such persons.

The concession holder must likewise transport the petroleum received by the State as royalty from all parties served by the pipeline, at the approved official rates.

In concessions for public service pipelines of both classes the pipelines may cross each other in any direction and may transport petroleum directly to vessels in the open sea.

Every two years, following a hearing with interested parties, the Ministry of Agriculture shall fix the rates to be charged, based on size of the investment, amortization, and costs of maintenance, plus a reasonable profit.

Owners of petroleum transported must defray the cost of storage tanks for accumulation of stocks, the concession holder being required to transport the petroleum when the shipper has accumulated 10,000 barrels.

Private pipelines. Such concessions are granted only to the holder of an exploitation concession, with the obligation to transport petroleum belonging to the State up to 11 percent of capacity. If petroleum belonging to private persons is transported, this is subject to the approved rates. The same procedure is followed for obtaining a concession as in the case of public pipelines.

Royalties. Holders of pipeline concessions must pay a royalty of 2 1/2 percent of the gross receipts obtained from the service. Excepted from this requirement are public concessions second class or private concessions which transport exclusively petroleum obtained from their own concessions, in which case there is no special tax.

3. Operations

Test excavations. Test excavations or pits (calicatas) may be made without previously obtaining a concession of any kind, but if this is to be done in privately owned land the owner's permission must be obtained. The work is regulated in the same manner as for non-combustible minerals, based on Articles 126 to 137 of Decree 2625 of 1939.

Compulsory work. The holder of a concession of exploitation of petroleum, naphtha, or natural gas must drill at least one well every five years on the concession regardless of its area. If there are less than 2,000 claims (pertenencias) concessions may be grouped together for purposes of drilling the one well in five years provided the concessions belong to the same field and the total surface area is not more than 2,000 claims.

Drilling should continue without interruption until commercial production is obtained or at least a depth of 4,000 feet has been reached unless a hypogenic rock formation is encountered.

In the case of minerals in the second and third groups, work must be started within two years, under penalty of a payment of $0.50 per hectare for each three months' delay. This period is waived if the concession is located more than five

kilometers from a means of public transportation. Work of exploitation may not be suspended for more than one year except in case of force majeure or permission from the Ministry of Agriculture. A mine is considered to be in exploitation if the concessionaire shows that he is making an investment commensurate with its size. This matter is governed by Articles 30, 33, and 35 of the Law of 1938 and Articles 92 to 127 of Decree 2625.

Forfeiture. Exploration concessions may be forfeited by renunciation in writing by the holder; if he fails to make payment of the surface canon for more than one year; if he fails to notify the Ministry of Agriculture of any transfer or assignment within one year; or if the concession is transferred or assigned to a foreign State or government.

Exploitation concessions are forfeited by failure to pay the surface canon within the first 90 days of the current year; for failure to pay the royalty on production, the amount of which is payable to the State if it elects to receive the amount in money; for failure to notify the Ministry of Agriculture of a transfer, or transfer to a foreign State or government; for failure to carry out compulsory work; or by renunciation by the concessionaire, provided he is not in arrears with the Treasury. These grounds are covered in Articles 201 to 223 of Decree 2625.

Rights and obligations of concession holders. The production, transportation, and exportation of petroleum and other combustible minerals may not be taxed directly or indirectly by the State, a province, or a municipality by any specific tax other than those of a general nature or those discussed herein.

The State may regulate the production of wells whenever this is deemed advantageous to the general interest, but the sealing of a well in commercial production is not permitted unless this is prescribed by a provision of general legislation. Otherwise the concession holders have full ownership of their production by right of exploiting the concession, by payment of $1 per hectare.

A concessionaire may enter rural properties to make geological and geographic studies with authorization to use instruments needed for such purposes, by payment of indemnity to the owner of the land. Permits are granted by the provincial government upon recommendation of the Ministry of Agriculture and the posting of suitable bond.

The holder of any concession is required to comply with all provisions governing labor that are applicable to mining operations and compatible with its nature. Various important positions connected with the drilling of wells are classed as technical for purposes of the Law on Nationalization of Labor.

Any infraction of the law or regulations governing combustible minerals is punishable by administrative fines, without prejudice to other liability that may be incurred by the party concerned or by forfeiture of the concession.

The foregoing rights and obligations are covered in detail in Articles 26 to 41, 151 to 172, and 244 to 255 of Decree 2625.

4. Law 635

The Law of May 9, 1938 and its Regulations contained in Decree 2625 are still in effect in large part and are the basis of the foregoing information. Law 635 was enacted on November 20, 1959 and makes certain changes or adds certain requirements to the operation of petroleum concessions. Of greatest significance is the cancellation of all pending applications, with the fact that no new applications will be accepted. The complete text of the law, in English translation, is given below.

Whereas: Article 88 of the Fundamental Law of the Republic provides that the subsoil belongs to the State, which may grant concessions for its exploitation in accordance with provisions of law, and which must be exploited in a manner that will promote the social well-being.

Whereas: It is the purpose and the definitive determination of the Revolutionary Government to accelerate the economic development of the country and to significantly improve the standard of living of the people of Cuba.

Whereas: The development and control of energy, particularly of the petroleum industry, is an indispensable basic condition and a determining factor in stimulating the industrialization and the harmonious and independent development of the national economy, as well as to improve the well-being of the people.

Whereas: The free initiative and activity of private enterprise has not succeeded in raising the level of petroleum production to meet the needs of the country, in spite of having been granted concessions of extensive areas of lands, under exceptionally advantageous conditions, which has converted the importation of fuel into a growing and burdensome charge on the available foreign exchange of the nation and limited its economic development.

Whereas: Under the protection of legislation enacted for the development of the national petroleum industry, concessions and credits from semi-public agencies were granted during the tyranny for the sole purpose of providing benefits to its most notorious servants in contravention of the national interests.

Whereas: It would be harmful to the economic interest of the nation to maintain petroleum concessions that have not been explored by geological and geophysical methods and which have not even been tested by wells intended to discover their oil-bearing possibilities and which consequently have not promoted the development of the petroleum industry.

Whereas: In use of the powers invested in it, the Council of Ministers hereby enacts the following Law N° 635

Article 1: Law-decree N° 1526 of July 8, 1954, maintained in effect by Decree-law N° 40 of July 8, 1958, is hereby repealed.

Article 2: Upon the promulgation of the present Law, no registration applications will be accepted for the exploration or exploitation of combustible minerals included in section one of Article 3 of the Law of May 9, 1938, with the exception of those cases in which a registration of exploration was extended in accordance with Article 3 and all requirements of this Law have been met, and is therefore to be converted into a registration of exploitation.

Also to be cancelled are all applications for registrations of exploration or exploitation regardless of the procedural stage reached at the time this Law is promulgated, and any amounts received for any reason according to law will be refunded.

Article 3: Holders of concessions for the exploration of combustible minerals included in section one of Article 3 of the Law of May 9, 1938, in effect on the date of promulgation of this Law, may apply to the Ministry of Agriculture for an extension for two years counting from the date indicated, in order to continue the exploration they are undertaking.

Applicants must show the following particulars:

a) The work of exploration that has been undertaken on any date included between January 1, 1956 and the date of this Law; and

b) That they are currently operating a continuous work center, engaged specifically in investigation and exploration.

In all cases, the extension may not cover more than eight thousand hectares, and if the exploration concession in operation is larger, the applicant shall freely select an uninterrupted area which the extension is to cover.

The Ministry of Agriculture shall always have the discretionary power to grant or refuse the extension applied for. If the extension is granted, the concessionaire must, within ten days following notification, pay the amount of the annual canon for one year in advance.

Article 4: If the extension of a concession for exploration is granted, in accordance with Article 3 of this Law, it shall remain in effect on condition that the concessionaire undertakes drilling work amounting to not less than one foot per hectare during the first year, proof of which must be submitted within thirty days following the end of the year, to the Ministry of Agriculture. If this is not done, the concession will be forfeited.

Article 5: Every concession of exploration shall be maintained as such for the period granted by law, as long as a productive well is not found, determined according to the following scale:

For productive wells at levels up to 1500 feet depth	4 barrels a day
For productive wells at levels from 1500 to 2000 feet in depth	5 barrels a day
For productive wells at levels from 2000 to 3000 feet in depth	10 barrels a day
For productive wells at levels from 3000 to 4000 feet in depth	15 barrels a day
For productive wells at levels of over 4000 feet.	20 barrels a day

One barrel consists of 42 gallons.

In order to determine the production capacity of a well, its continuous production for thirty consecutive days is taken as the basis. This production shall be calculated annually, and the royalty to be paid will be adjusted to the results of the revision.

Article 6: Whenever any well "comes in" that is considered productive according to the foregoing scale, the exploration concession shall be automatically converted into a concession of exploitation, and in order to retain it the holder becomes obligated to undertake drilling each year at the rate of two feet per hectare included in the concession, and each well that is drilled must have a minimum depth of 2000 feet.

In concessions of one thousand hectares or less, the concessionaire must drill at least one well a year to a minimum depth of 2000 feet.

The drilling obligation shall cease only when the maximum productivity has been attained that is advisable to prevent rapid exhaustion of the deposit.

Noncompliance with the obligations imposed by this article shall result in the automatic cancellation of the concession.

Article 7: All holders of concessions of exploration who accept the benefits of this law must accompany their application by a map showing the boundaries made when initiating the proceedings, indicating the relationship between the point of departure and the locations of the polygon with two unquestionable points shown on the map of the Cuban Institute of Cartography and Assessment (Instituto Cubano de Cartografía y Catastro) which will be designated by that agency upon request of the applicant.

Within a period of six months following submission of the map, the holder of a concession of exploration must undertake to mark the boundaries of the land at his own expense, according to the map with the State reserving the right to verify this. In the event that substantial errors are found by which the surface area differs by more than 2 percent, the concession is automatically cancelled.

Article 8: Natural or juridical persons who are concession holders, under any title, of several concessions of exploitation may select four of them, taking into account that their nearest boundaries must be not less than twenty kilometers distant from each other, and on the concessions selected they shall pay the annual canon (tax) established by Article 22 of the Law of May 9, 1938. On the remaining concessions of which they are holders the annual canon to be paid will be one hundred pesos per hectare.

Article 9: Every natural or juridical person who under any title is commercially exploiting a deposit of combustible minerals included in section one of Article 3 of the Law of May 9, 1938 shall be obligated to pay the State a royalty (participación) of 60 percent, in cash or in kind, at the option of the State, of the total mineral found and extracted on the concession. This tax shall be based on the commercial value at the mouth of the well and shall be payable monthly at the appropriate Fiscal District (Zona Fiscal) within thirty days after the end of each month.

The royalty fixed in the foregoing paragraph will be reduced to 55 percent in the event that the petroleum obtained is refined within the national territory and after being refined is destined for export. The Regulations shall specify the requirements necessary to enjoy this benefit.

The State reserves the right to acquire all or a part of the petroleum that is produced within the national territory at the world market price. The Regulations shall determine the manner in which this price shall be fixed.

Article 10: Holders of concessions for exploitation of combustible minerals included in section one of Article 3 of the Law of May 9, 1938, located in zones in which naphtha has been found, shall be exempt from the other conditions imposed by this Law with respect to petroleum, provided that within a period of thirty days counted from the date of taking effect, they renounce in favor of the State their right to drill deep wells to obtain petroleum or gas.

Article 11: If subsequent to the renunciation referred to in the preceding article and for the purpose of obtaining naphtha concessionaires for this product find petroleum, the wells shall revert to the State, which will compensate the concessionaires for the expenses incurred in drilling and will pay them a royalty of 5 percent of all petroleum obtained from such wells.

Article 12: Within the meaning of this Law and that of May 9, 1938, on Combustible Minerals, naphtha shall be considered as any natural liquid hydrocarbon showing a density greater than 50 degrees A.P.I. taken at a temperature of 15 degrees centigrade. Petroleum is considered to be any natural liquid hydrocarbon showing a density of less than 50 degrees A.P.I. taken at a temperature of 15 degrees centigrade.

Article 13: After the promulgation of this Law no transfer may be made of a concession of exploration or exploitation of combustible minerals included in section one of Article 3 of the Law of May 9, 1938, without the prior authorization of the Ministry of Agriculture.

Transfers made before this Law took effect which have not been registered in the Ministry of Agriculture must be so registered within fifteen days from the date (of the Law) or the concession will otherwise be considered forfeited. The transfers must be made by public instrument and the corresponding fiscal charges must be paid before presentation to the aforementioned Ministry.

Article 14: All natural or juridical persons who are holders of concessions for the exploration or exploitation included in section one of Article 3 of the Law of May 9, 1938 shall be required to make available to the Cuban Institute of Petroleum, which is created by Article 16 of this Law, all geological, geophysical, and geodesical information or any other kind of information obtained from studies and exploration undertaken on their concessions.

The concealment of such information shall result in forfeiture of the concession.

Article 15: The Ministry of Agriculture, through the Department of Mines and Petroleum is hereby empowered to fix annual production quotas for the refineries existing in the country.

Article 16: There is created the Cuban Institute of Petroleum under the Department of Industrialization of the National Institute of Agrarian Reform ,which shall have the following aims:

a) The exploration, exploitation, refining, transportation, distribution, purchase and sale of petroleum,its derivatives, and domestic fuels.

b) The development of the petrochemical industry and the undertaking of any other type of commercial or manufacturing operations that will stimulate the domestic petroleum industry.

c) Administration of all enterprises taken over by any agency of the State, the provinces, the municipalities, and the autonomous and semi-autonomous agencies, that are engaged in the exploration, exploitation, refining, transportation, distribution, purchase and sale of petroleum and its derivatives.

d) To advise the agencies of the Government in all activities connected with petroleum policy and domestic fuels.

Article 17: The following shall form a part of the assets of the National Institute of Agrarian Reform and shall be administered by the Cuban Institute of Petroleum:

a) The reserves of combustible minerals as established by this Law and by the Law of May 9, 1938.

b) All installations, equipment, studies, information, and other assets that are property of agencies of the State, the provinces, municipalities, and autonomous and semi-autonomous entities that may be used in the promotion of the national petroleum industry, as well as any rights these entities possess in petroleum enterprises.

c) All properties and claims (pertenencias) of companies engaged in the exploration, exploitation, refining, transportation, purchase and sale of petroleum and its derivatives and domestic fuels that have been or that may be confiscated by the Ministry for the Recovery of Misappropriated Property.

d) All bonds and shares which have been or which may be confiscated by the Ministry for the Recovery of Misappropriated Property which represent a participation in domestic or foreign companies engaged in the exploitation of petroleum and its derivatives.

Article 18: The National Institute of Agrarian Reform is empowered to organize the Cuban Institute of Petroleum, specifying its structure and functions and preparing its budget, reporting thereon to the Council of Ministers.

Article 19: All legal provisions and regulations are repealed if contrary to the present Law, which shall take effect upon publication in the Gaceta Oficial.

5. Petroleum Refineries

In addition to the general provisions on mining, there are special provisions governing the investment of domestic or foreign capital in petroleum refineries, contained in Law-decree 1758 of November 2, 1954, regulated by Decree 3862 of November 30, 1955.

Establishment. The establishment of refineries is subject to laws governing health, safety, and police, for the protection of the lives and health of workers. A refinery must be located in a suitable place, away from fire hazards to a town and by agreement with the Government must refine petroleum belonging to the State, the amount to be prorated so as not to exceed the cost of production.

Application for the construction of a refinery is to be submitted through the Ministry of Agriculture for authorization by the President of the Republic.

Fiscal regime. The special treatment extends for twenty years, counting from November 1954, and may be applied for through the Ministry of Finance by natural persons or companies that propose to construct or expand installations for the refining of petroleum.

Customs duties on the importation of certain derivatives such as tractorine, kerosene, etc. are reduced. Consular fees on imports of crude petroleum for refining are waived but not customs duties and the tax on gross receipts for estimated production of fuel oil, gas, asphalt and derivatives, the actual production of which is to be declared quarterly in sworn statements to the Tax Administration.

For income tax purposes and the excess profits tax deductible expenses may include premiums paid or due for advance payments on loans for the erection or expansion of petroleum refineries, provided the amount is equal to or more than half the value of all assets of the enterprise and that the interest rates or premiums are not higher than the current market rate for capital. Such deductions may be made for a period of fifteen years after cancellation of the loan.

Refining enterprises are also entitled to exemption from import duties on imports of machinery, equipment, materiel, and accessories intended for construction of a refinery. They are also exempt from payment of the export tax on funds for technical services, remittances abroad in connection with investments and for the importation of crude petroleum if the derivatives are exported.

A system has been established for the reimbursement of duties and taxes on the products of petroleum refineries operating in Cuba which are exported or used by vessels operating on the high seas. This includes all fiscal charges expended for the importation of raw materials used in processing the products exported which had to be paid at the time of importation.

There is also reimbursement of charges paid for the sale of petroleum and its derivatives to the State, the provinces, municipalities, autonomous agencies and other government entities.

The foregoing system of benefits may not be altered to the detriment of any natural or juridical person entitled to it. Any increase in municipal taxes on the refining industry or the establishment of specific taxes or excises relating thereto is prohibited.

The benefits now granted do not exclude others that may be established by law in the future, applicable to petroleum refineries.

Economic advantages. Beneficiaries may transport their petroleum products by the most suitable means with no other restrictions than the conservation and safety of the highways. They may utilize pipelines, or tankers flying the Cuban or a foreign flag, for overseas or coastwise trade.

Prices of petroleum and its derivatives may not be controlled or limited and will be determined by free competition, except that they may not exceed ceilings fixed by the Ministry of Commerce.

Refineries may increase the prices of their products whenever importation costs increase, including freight rates, consular fees, exchange differences, and shipping costs or other charges affecting the product in question and any other expenses

relating to costs. Articles 23 to 25 of Law-decree 1758 authorize the procedure to be followed. An authorized increase is not compulsory on other importers or refineries and any formation or intention of forming a cartel is prohibited.

There will be no discrimination between refineries by reason of the nationality of their owners or workers or of investors in shares issued by these enterprises.

Refineries shall have the right to acquire crude petroleum obtained from Cuban subsoil at fair prices prevailing in the market.

As to rights of permanence, the provisions and procedure of Law-decree 1550 of August 4, 1954 govern this matter.